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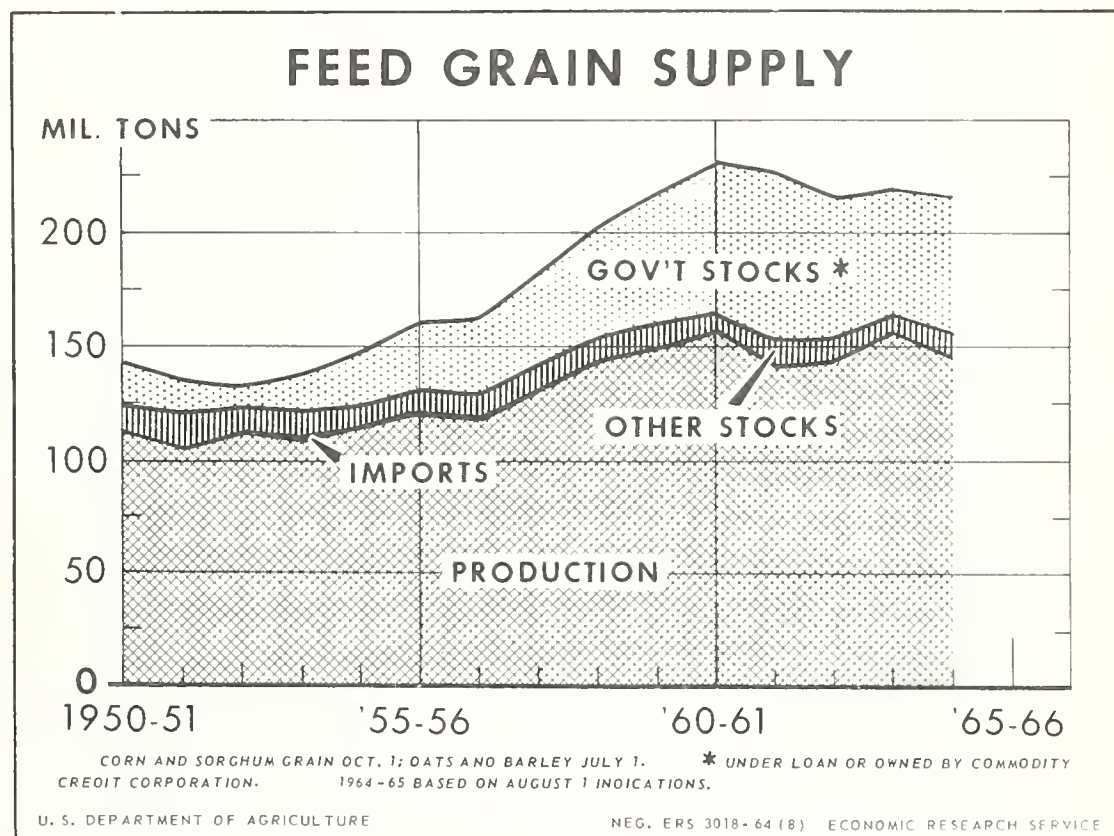


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AUGUST 1964

The 1964-65 feed grain supply, based on August indications, will total about 216 million tons, 3 million less than in 1963-64 and a little below the 1958-62 average. The 1964 crop, indicated at 146 million tons, is 10 million below the record crop in 1963. This reduction, however, is largely offset by the prospective increase of 7 million tons in carryover into 1964-65, bringing the total to around 70 million tons. The 1964-65 corn supply is slightly larger than last year, but supplies of sorghum grain, oats, and barley are all below 1963-64 levels.



IN THIS ISSUE

Feed Grain Prospects for 1964-65

Production of Commercially Prepared
Feeds by States

Urea Expands as a Source of Protein Feed

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Table 1.- Statistical Summary of Prices, Indexes and Price Ratios

Item	Unit	PRICES							
		Seasonal average		July	1964				
		1961-62	1962-63	1963	Apr.	May	June	July	
		Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	
<u>Feed Grains and Hay</u>									
Corn, No. 3 Yellow, Chicago	Bushel	1.11	1.19	1.32	1.24	1.28	1.26	1.22	
Price received by farmers, U. S.	Bushel	1.08	1.10	1.19	1.14	1.16	1.16	1.12	
Oats, No. 1 White, Chicago	Bushel	.714	.694	.683	.677	.672	.649	.647	
No. 2 White, Minneapolis	Bushel	.677	.673	.648	.656	.654	.640	.520	
Price received by farmers, U. S.	Bushel	.640	.624	.623	.632	.628	.633	.593	
Barley, No. 3, Minneapolis	Bushel	1.35	1.12	1.05	1.14	1.16	1.10	1.08	
Price received by farmers, U. S.	Bushel	.981	.915	.956	.906	.923	.957	.960	
Sorghum grain - No. 2 Yellow, Kansas City	100 pounds	1.89	1.95	2.07	2.00	2.06	2.14	2.16	
Price received by farmers, all types, U. S.	100 pounds	1.80	1.82	1.77	1.74	1.76	1.78	1.79	
<u>Hay</u>									
Hay, No. 1 Alfalfa, baled, Kansas City	Ton	26.65	28.75	26.50	21.80	21.80	23.30	23.50	
All hay, price received by farmers, baled, U. S.	Ton	20.60	21.60	21.30	23.50	22.30	20.90	20.80	
<u>Byproduct Feeds, Wholesale, Bulk</u>									
Wheat bran, Minneapolis	Ton	34.40	37.20	33.30	36.80	31.60	32.20	31.40	
Buffalo	Ton	39.20	43.50	41.50	41.00	36.10	33.60	35.90	
Wheat middlings, Minneapolis	Ton	34.50	38.40	36.70	35.80	29.50	32.50	33.10	
Buffalo	Ton	41.10	45.30	43.00	43.80	37.80	39.70	40.40	
Soybean meal, 44 pct., solvent, Decatur	Ton	63.60	71.30	72.00	69.90	65.50	66.50	65.80	
50 pct., solvent, Decatur	Ton	69.40	77.10	79.00	80.00	74.20	73.20	72.90	
Cottonseed meal, 41 pct., expeller, Memphis	Ton	59.20	66.90	69.80	57.90	52.10	53.90	56.20	
Linseed meal, 32-36 pct., solvent, Minneapolis ..	Ton	66.00	67.30	68.30	54.80	52.00	51.80	51.50	
Peanut meal, 45 pct., S. E. mills	Ton	61.80	67.40	70.00	60.20	57.90	57.60	57.60	
Gluten feed, 21 pct., Chicago	Ton	37.50	43.20	39.80	40.00	39.50	36.60	38.50	
Hominy feed, Chicago	Ton	40.10	42.70	42.60	43.80	44.00	42.80	41.20	
Brewers' dried grains, 24 pct., Milwaukee	Ton	38.90	44.20	41.80	34.00	35.90	32.40	31.00	
Distillers' dried grains, 28 pct., Cincinnati	Ton	55.00	60.20	62.80	51.60	54.60	57.20	56.70	
Tankage digester, 60 pct., Chicago	Ton	88.70	96.40	96.50	92.20	89.80	84.20	84.40	
Meat meal, 50 pct., Chicago	Ton	86.30	93.70	95.20	87.50	83.80	78.60	81.60	
Fish meal, 60 pct., Buffalo, f.o.b. seaboard	Ton	123.20	126.50	127.00	130.00	123.50	122.80	126.50	
Alfalfa meal, 17 pct., dehydrated, Kansas City ..	Ton	47.60	48.40	42.40	38.40	37.20	35.20	36.00	
Molasses blackstrap, New York	Ton	26.95	35.50	39.02	32.48	30.35	27.18	23.94	
Tallow, inedible prime, Chicago	Pound	.051	.050	.054	.059	.058	.058	.050	
<u>Prices Paid by Farmers</u>									
Wheat bran	100 pounds	2.97	3.14	3.04	3.08	3.04	2.94	2.98	
Wheat middlings	100 pounds	3.03	3.22	3.16	3.15	3.09	3.01	3.08	
Soybean meal, 44 pct.	100 pounds	4.44	4.87	4.88	5.01	4.87	4.74	4.76	
Cottonseed meal, 41 pct.	100 pounds	4.26	4.60	4.67	4.60	4.49	4.40	4.39	
Broiler grower mash	100 pounds	4.64	4.78	4.81	4.81	4.80	4.78	4.78	
Laying feed	100 pounds	4.35	4.46	4.49	4.48	4.47	4.43	4.44	
Dairy feed, 16 pct.	100 pounds	3.65	3.76	3.74	3.72	3.71	3.66	3.67	
Hog feed, over 29 pct.	100 pounds	5.52	5.84	5.87	5.91	5.80	5.65	5.70	
<u>Price Indexes</u>									
		Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Feed grains, price received by farmers, U. S.	1957-59=100	95	99	107	103	104	105	102	
Eleven principal high-protein feeds, wholesale									
prices at terminal markets	1957-59=100	110	122	123	118	112	111	111	
Five oilseed meals	1957-59=100	114	126	129	125	116	116	115	
Tankage, meat scraps, and fish meal	1957-59=100	97	102	102	99	97	94	95	
Gluten feed, brewers' dried grains, and									
distillers' dried grains	1957-59=100	99	113	108	98	101	98	100	
Feed, price paid by farmers, U. S.	1957-59=100	99	103	104	104	103	102	101	
<u>Price Ratios (July average)</u>									
Hog-corn, Chicago 2/	1953-62=14.5	Bushel	15.5	13.4	14.2	11.6	11.8	12.9	14.3
Hog-corn, U. S. farm price	1953-62=14.5	Bushel	16.5	14.3	14.4	12.3	12.3	12.8	14.2
Beef steer-corn, Chicago 3/	1953-62=18.4	Bushel	23.8	21.1	18.6	17.0	15.9	17.0	19.0
Milk-feed, U. S.	1953-62=1.27	Pound	1.42	1.36	1.29	1.30	1.26	1.26	1.33
Milkfat-feed, U. S.	1953-62=22.5	Pound	24.7	23.2	22.6	23.2	23.0	23.3	23.5
Egg-feed, U. S.	1958-62= 9.6	Pound	9.9	9.8	8.8	8.9	8.4	8.8	9.2
Farm chicken-feed, U. S.	1958-62= 3.3	Pound	2.9	2.9	2.8	2.8	2.6	2.6	2.7
Commercial broiler-feed, U. S. ...	1958-62= 3.3	Pound	3.2	3.1	3.0	2.9	2.8	2.9	3.1
Turkey-feed, U. S.	1958-62= 6.4	Pound	5.8	6.3	6.0	5.9	6.0	6.0	6.0

1/ Units of corn or other concentrate ration equal in value to 100 pounds of hog or beef steer, one pound of chicken, butterfat, or milk, or one dozen eggs. 2/ Based on packer and shipper purchases of hogs and No. 3 Yellow corn. 3/ Based on price of beef steers sold out of first hands for slaughter, and No. 3 Yellow corn. 4/ Preliminary.

Prices compiled from Chicago Board of trade, Minneapolis Daily Market Record, Kansas City Grain Market Review, National Provisioner, and reports of the Agricultural Marketing Service.

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T H E F E E D S I T U A T I O N
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Approved by the Outlook and Situation Board, August 13, 1964

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SUMMARY

The supply of feed concentrates for the 1964-65 feeding year is estimated at 249 million tons on the basis of August 1 indications. This would be 2 million tons less than in 1963-64 but about equal to the 1958-62 average. Feed grain production was estimated at 146 million tons, 10 million below the 1963 output. This reduction is largely offset by prospective increases in feed grain carryover and in wheat feeding. The increase in wheat feeding, however, is not expected to add substantially to 1964-65 feed supplies because of the limited "free" supply of wheat available. However, wheat has become competitive as a feed in some areas this summer, with wheat prices lower than corn in a number of Eastern and Southern States.

The feed grain supply for 1964-65 is estimated at 216 million tons, 3 million below last year. Disappearance of feed grains has declined during the past 2 years as a result of a small reduction in the number of grain-consuming livestock and in the feeding rate per animal unit. A further slight reduction in grain-consuming livestock is in prospect for 1964-65. If the current feeding rate is maintained, total disappearance in 1964-65 would be slightly below the 1963-64 level of 149 million tons.

The corn supply for 1964-65 is estimated at 5,436 million bushels, slightly above a year earlier. The 1964 crop, estimated in August at 3,885 million bushels, was 5 percent below the 1963 crop; but slightly more than offsetting this reduction was a prospective increase in the October 1 carryover. The 1964-65 sorghum grain supply is estimated at 1,133 million bushels, 105 million less than in 1963-64. The oat supply this year is 2 percent below a year earlier and the barley supply is down 4 percent.

Feed grain prices advanced seasonally from last November to June 1964, then declined about 3 percent from June to July. While prices last fall and winter were generally above a year earlier, prices in July averaged about 5 percent lower than a year ago. Lower prices this summer, especially for corn, result from much larger "free" supplies and the lower 1963 loan rate. Feed grain prices are expected to continue below a year earlier this summer. Feed grain prices this fall and winter may not be greatly different from prices in that period of 1963-64. The 1964 loan rates for corn, barley, and grain sorghum were increased a little from the 1963 levels, which will tend to support prices in 1964-65. Provisions for CCC sales of feed grains at not less than the loan rate plus carrying charges also will apply in the 1964-65 marketing year. This was a price strengthening factor in 1963-64 when sales of feed grains by CCC dropped sharply from the high level of the 2 preceding years.

Feed grains stocks on July 1 totaled 94 million tons, about 7 million more than on that date last year but 15 million below the record stocks in 1961. Stocks of corn totaled 2,345 million bushels, 230 million more than a year earlier. Practically all of this increase was in stocks outside the price support program which totaled about 866 million bushels. "Free" stocks appear adequate to take care of July-September requirements; and a tight corn supply situation, such as developed in this quarter last year, is not in prospect this summer.

High-protein feed supplies, after increasing steadily in recent years, declined about 2 percent in 1963-64 from the record 16.6 million tons fed in 1962-63. The reduction was due entirely to a drop in soybean meal consumption to about 9.0 million tons, 550,000 tons less than in 1962-63. More than half of this reduction, however, has been offset by increased feeding of other high-protein feeds, especially tannage, meat meal, fish meal, and gluten feed. High-protein feed prices in 1963-64 have averaged close to the 1962-63 level. Prices of these feeds have declined since January and in July, they averaged 10 percent below a year earlier.

PROSPECTS FOR FEED SUPPLIES AND CONSUMPTION IN 1964-65

Feed Concentrate Supply for 1964-65 Slightly Below Last Year's Level

The supply of concentrates for 1964-65 is estimated at 249 million tons on the basis of August 1 indications, 2 million tons less than in 1963-64 but about equal to the 1958-62 average. Feed grain production this year is down 10 million tons from 1963, but a prospective increase of 7 million tons in the

feed grain carryover will largely offset this reduction. The quantity of wheat available for feeding is expected to be somewhat larger than in other recent years. Wheat feeding, however, will not add materially to total feed supplies because of limited "free" supplies of wheat.

The tonnage of feed concentrates fed to livestock has declined a little during the past 2 years as numbers of hogs and dairy cattle have been reduced and the rate of feeding per animal has declined from the record rate in 1960 and 1961. In 1964-65, the number of grain-consuming livestock on farms is expected to decline to about 169 million, a drop of 3.5 million since 1962-63. Assuming that the rate of feeding continues near the 1963-64 level of 0.88 ton per animal unit, the quantity of all feed concentrates consumed in 1964-65 would be slightly below 1963-64 and a little below the high level of the previous 2 years.

Feed Grain Production
Down 10 Million Tons

Feed grain production this year is estimated at 146 million tons on the basis of August 1 indications, about 10 million tons below the record 1963 crop. Reductions are expected in each of the 4 feed grains. Much of the prospective reduction in output is in the Western Corn Belt and the Southwest. Feed grain production was near or a little above a year earlier in other regions of the country. The anticipated smaller feed grain crop is largely offset by a prospective increase in carryover, and the 1964-65 supply of feed grains is estimated at 216 million tons, 3 million tons below the 1963-64 supply. Combined domestic use and exports in 1963-64 is now expected to total 149 million tons, 3 million less than last year and 5 million below the heavy consumption in 1961-62. The estimated 117 million tons fed to livestock in 1963-64 would be a little lower than in the past 2 years, while other domestic uses and exports are a little larger (table 3). The quantity of feed grains consumed by livestock may decline slightly in 1964-65, but other domestic uses and exports are expected to continue near the level of the past 2 or 3 years.

Smaller feed grain production this year is the result of smaller feed grain acreage and generally lower yields. Farmers signed up to divert a record acreage to soil-conserving uses under the 1964 Feed Grain Program. The 34.3 million acres signed up under this program was about 8.6 million more than in 1963. The acreage planted to feed grains this year is estimated at 123.6 million acres, 7 million acres less than in 1963 and 28 million below the 1959 and 1960 level. Planted acreage of each of the 4 feed grain was reduced from last year--corn down 4 percent, oats 7 percent, barley 11 percent, and sorghums 4 percent.

Corn Production Down 5 Percent;
Supply Slightly Above 1963-64 Level

The 1964 corn crop was estimated in August at 3,885 million bushels, 5 percent below the 1963 crop, but 6 percent above the 1958-62 average. The prospective reduction in the corn crop is expected to be about offset by an

Table 2.- Feed concentrate balance, numbers of animal units, and feed per unit, United States, year beginning October, average 1958-62, annual 1959-64

Item	Average 1958-62	1959	1960	1961	1962	1963 1/	1964 2/
	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons
<u>Supply</u>							
Stocks beginning of year 3/	71.5	67.5	74.6	84.7	71.8	63.1	70.0
Production of feed grains:							
Corn	102.8	107.1	109.4	101.5	101.8	114.3	108.8
Oats	18.0	16.8	18.5	16.2	16.3	15.7	14.6
Barley	10.4	10.1	10.3	9.5	10.5	9.6	9.3
Sorghum grains	15.4	15.6	17.4	13.4	14.3	16.3	13.2
Total production	146.6	149.6	155.6	140.6	142.9	155.9	145.9
Imports of feed grains	.4	.5	.5	.4	.2	.3	.5
Wheat and rye fed	1.6	1.5	1.7	1.8	1.4	1.8	2.2
Byproduct feeds fed	28.2	27.4	28.0	28.9	29.7	29.9	30.2
Total supply	248.3	246.5	260.4	256.4	246.0	251.0	248.8
<u>Utilization, October-September</u>							
Concentrates fed 4/							
Corn	86.4	85.4	87.1	91.1	90.5	85.4	
Oats	15.6	14.7	15.6	14.1	14.0	13.5	
Barley and sorghum grains	16.2	15.7	17.9	17.0	17.1	18.7	
Wheat and rye	1.6	1.5	1.7	1.8	1.4	1.8	
Oilseed cake and meal	12.0	11.3	12.0	12.4	12.6	12.1	
Animal protein feeds	3.1	3.0	3.1	3.2	3.3	3.5	
Other byproduct feeds	13.1	13.1	12.9	13.3	13.8	14.3	
Total concentrates fed	148.0	144.7	150.3	152.9	152.7	149.3	
Feed grains for seed, human food and industry	13.3	13.0	13.1	13.5	13.7	14.0	
Feed grain exports	14.3	12.2	12.3	17.6	16.6	18.0	
Total utilization	175.6	169.9	175.7	184.0	183.0	181.3	
Utilization adjusted to crop year basis	176.0	171.9	175.7	184.6	182.9	181.0	
Stocks at end of crop year 3/	72.3	74.6	84.7	71.8	63.1	70.0	
<u>Supply and utilization per animal unit</u>							
Total supply (Mil. tons)	248.3	246.5	260.4	256.4	246.0	251.0	248.8
Concentrates fed (Mil. tons)	148.0	144.7	150.3	152.9	152.7	149.3	
Grain-consuming animal units (Mil.)	168.5	165.7	167.6	169.0	172.5	170.2	169.0
Supply per animal unit (Ton)	1.48	1.49	1.55	1.52	1.43	1.47	1.47
Concentrates fed per animal unit (Ton)	.88	.87	.90	.90	.89	.88	

1/ Preliminary.

2/ Preliminary estimates based on indications in August 1964.

3/ Stocks of corn and sorghum grains in all positions on October 1, and oats and barley on July 1.

4/ Total quantities fed in the United States, including domestically produced and imported grains and byproduct feeds.

increase in carryover on October 1, to around 1,550 million bushels, more than 200 million above a year earlier. The corn supply for 1964-65, based on these early prospects, would be 5,436 million bushels, 37 million more than in 1963-64.

The reduction in the corn crop this year was due largely to a decline in acreage, although indicated yield also is slightly below the record level last year. The corn acreage to be harvested in 1964 is estimated at 58.4 million acres, 2.2 million less than last year and 13.5 million below 1959 and 1960 average. Farmers signed up to divert 23.0 million acres of corn to soil-conserving uses under the 1964 Feed Grain Program, 5.3 million more than was signed up in 1963.

Disappearance of corn in 1963-64 is estimated at 3,849 million bushels, a decline of more than 100 million below the 2 preceding years. The decline in corn consumption during the past 2 years has been due at least in part to increasing corn prices in relation to prices of other feed grains and also in relation to prices of livestock and livestock products. Corn consumption increased above production in 1961-62 and 1962-63. During those 2 years, carryover stocks of corn were reduced nearly 700 million bushels. The record crop in 1963 and the decline in utilization this year is expected to result in an increase of a little over 200 million bushels in carryover stocks during 1963-64, to 1,550 million on October 1. Corn exports have increased steadily in recent years, and are expected to reach a record high of around 475 million bushels in 1963-64.

Oat Supply for 1964-65 Down 2 Percent

The supply of oats for 1964-65 is estimated at 1,230 million bushels on the basis of August indications, 29 million bushels or 2 percent less than a year earlier. Production has declined about 35 percent during the past 6 years as farmers have reduced oat acreage. The 1964 crop, estimated in August at 910 million bushels, is 7 percent smaller than last year. Production this year is substantially below 1963 output in the North Central Region, but a larger crop was harvested in most of the Southern States where droughts reduced production in 1963.

Smaller oat production in recent years has resulted in a steady decline in the quantity fed to livestock--a decline that has been offset by increased feeding of corn and sorghum grain. In 1963-64 the quantity of oats fed to livestock was down 7 percent from the preceding year and 16 percent below the 1958-62 average.

Barley Supply Down 4 Percent

The barley supply for 1964-65 is estimated at 536 million bushels, based on August indications, 4 percent less than a year earlier and 12 percent below the 1958-62 average. Barley production also has declined in recent years, and the 1964 crop, estimated at 388 million bushels, is 12 million less than in 1963 and 90 million below the record crop in 1958.

Table 3 .--Feed grains: Supplies and utilization, United States, average 1958-62, annual 1960-64

Marketing year beginning 1/	Supply				Utilization				
	Carry-over	Production	Imports 2/	Total	Livestock feed 3/	Food and industrial use	Seed	Exports 2/	Total
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Corn									
Average 1958-62	1,686	3,670	1	5,357	3,086	283	12	321	3,702
1960	1,787	3,908	1	5,696	3,110	275	11	292	3,688
1961	2,008	3,626	1	5,635	3,253	296	11	435	3,995
1962	1,640	3,637	1	5,278	3,232	302	12	416	3,962
1963 4/	1,316	4,082	1	5,399	3,048	315	11	475	3,849
1964 4/	1,550	3,885	1	5,436					
Oats									
Average 1958-62	312	1,128	2	1,442	990	40	80	30	1,140
1960	267	1,155	1	1,423	946	40	83	29	1,098
1961	325	1,011	1	1,337	922	41	76	21	1,060
1962	277	1,020	4	1,301	886	42	74	25	1,027
1963 4/	274	981	4	1,259	828	42	68	6	944
1964 4/	315	910	5	1,230					
Barley									
Average 1958-62	162	432	15	609	242	91	24	94	451
1960	167	431	15	613	259	90	25	86	460
1961	153	396	20	569	246	92	23	84	445
1962	124	436	5	565	237	92	22	67	418
1963 4/	147	400	13	560	245	92	20	70	427
1964 4/	133	388	15	536					
Sorghum grain									
Average 1958-62	553	549	5/	1,102	372	10	2	96	480
1960	581	620	5/	1,201	415	11	2	71	499
1961	702	480	5/	1,182	411	9	2	99	521
1962	661	510	5/	1,171	391	10	2	113	516
1963 4/	655	583	5/	1,238	466	10	2	100	578
1964 4/	660	473	5/	1,133					
Total feed grains									
	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons	Mil. tons
Average 1958-62	71.6	146.5	.4	218.5	118.6	11.0	2.2	14.4	146.2
1960	74.6	155.6	.4	230.6	120.1	10.8	2.3	12.7	145.9
1961	84.7	140.6	.5	225.8	123.2	11.4	2.1	17.3	154.0
1962	71.8	142.9	.2	214.9	121.3	11.6	2.1	16.8	151.8
1963 4/	63.1	155.9	.4	219.4	117.5	12.0	1.9	18.0	149.4
1964 4/	70.0	145.9	.5	216.4					

1/ Marketing year beginning October 1 for corn and sorghum grain; July 1 for oats and barley.
 2/ Includes grain equivalent of products. 3/ Residual; includes small quantities for other uses and waste. 4/ Preliminary; utilization and carryover at the end of the year and 1964 production based on indications in August 1964. 5/ Not reported separately.

Most of the decline in production this year is in the Northern Plains due principally to a smaller acreage than in 1963. Production in the West North Central Region was 17 million bushels less than a year earlier and about 28 million below the 1958-62 average. The smaller barley supply in this area, especially in Minnesota and the Dakotas, will result in reduced supplies of malting barley for the 1964-65 marketing year. Utilization of barley in 1963-64 was a little larger than in 1962-63 despite the slightly smaller domestic supply, which was offset by increased imports and a reduction in carryover at the close of the marketing year.

Sorghum Grain Supply
Down 8 Percent

The supply of sorghum grain for 1964-65 is estimated on the basis of August 1 prospects at 1,133 million bushels, 8 percent less than in 1963-64 but 3 percent above the 1958-62 average. The sorghum grain crop was estimated at 473 million bushels, 110 million less than a year earlier and 76 million below the 1958-62 average. This year, farmers are expected to harvest about 12.2 million acres of sorghums for grain, 10 percent less than in 1963. Yield per acre was indicated at 38.7 bushels per acre, 11 percent below the 1963 yield.

Sorghum grain utilization in the 1963-64 marketing year is estimated to be about equal to the 1963 crop of 583 million bushels. This would be about 12 percent above 1962-63 utilization and 20 percent above the 1958-62 average. The quantity fed to livestock in 1963-64 is expected to reach a record high of 466 million bushels, about 75 million more than the year before. Exports of sorghum grain are estimated at about 100 million bushels, a little below a year earlier and close to the 5-year average. Total utilization of sorghum grain in 1964-65 probably will exceed 1964 production, resulting in a smaller carryover at the close of the marketing year.

Wheat Feeding To Increase
In 1964-65

The quantity of wheat to be fed to livestock in 1964-65 is expected to be somewhat larger than in other recent years as a result of the 1964 Wheat Program. The quantity fed, however, will be limited by the "free" supply of wheat available. The 1964 crop was estimated in August at 1,285 million bushels, only a little above the average of recent years.

Because of the change in the Wheat Program, wheat prices have declined this summer and wheat is competitive with corn and other feed grains in some areas of the country for the first time in more than 15 years. The national average loan rate for wheat this year is \$1.30 per bushel, 52 cents less than in 1963. In recent years about 40 to 50 million bushels of wheat have been fed annually, made up principally of wheat fed on farms where produced or low quality wheat not suitable for milling. The quantity fed in 1964-65 is expected to be

around 50 percent above this level. Much of this wheat will be fed during July-September when wheat prices are low in relation to feed grains. Much of the increase in feeding is expected to be in soft red winter wheat in the Southeastern, South Central, and Midwestern States. In these areas the crop is larger than in recent years and some surplus wheat will be available for feeding.

Wheat prices have declined this summer to the lowest level in relation to feed grains since 1952. In July, the average price received by farmers for wheat was \$1.33 per bushel, or \$2.22 per 100 pounds, only 22 cents per hundred pounds above average prices received for corn and barley. The average price of wheat per hundred pounds was below corn in a number of the Atlantic Coast and Southern States (table 35). In Pennsylvania, wheat was 30 cents per hundred below corn; in North Carolina, 11 cents below corn; and in Arkansas 10 cents below corn. Wheat prices were a little above corn in most of the North Central States, but in some of these States the price difference was quite small, especially after allowance for difference in feeding value. Wheat is generally considered to have about 5 percent more feeding value pound-for-pound than corn and about 10 to 15 percent more than barley or sorghum grain. Wheat prices were generally well above the price of corn in the Northern Plains. Wheat was also above barley prices in the Northwestern States and was substantially above sorghum grain prices in the Southern Plains.

Slight Decline in Grain-Consuming Livestock
Numbers in Prospect for 1964-65

The number of grain-consuming livestock to be fed in 1964-65 is expected to decline slightly from this year's level. The number of animal units reached a postwar high of 172.5 million in 1962-63, then declined to about 170 million in 1963-64. A further decline to about 169 million is expected in 1964-65. Much of this prospective reduction is in hogs. Farmers reduced their 1964 spring pig crop 8 percent below a year earlier, and a 7 percent reduction is planned in this year's fall pig crop. This would mean fewer hogs to be fed during the remainder of 1964 and the first half of 1965. For the entire 1964-65 feeding year hog production may be about 5 percent less than in 1963-64.

Cattle feeding, which has been increasing in recent years, is expected to continue at a high level in 1964-65. The number of cattle fed during 1963-64 has continued near the record level in 1962-63. The number on feed was down 1 percent from a year earlier on January 1, up 1 percent on April 1, and down 3 percent from a year earlier on July 1. Much of the reduction was in the North Central States. The greatest reduction in the number on feed was in the lightweight cattle of less than 700 pounds.

Broiler production has been expanding for a number of years, although at a more moderate rate in recent years. A further small increase may occur during 1964-65, despite below-average broiler-feed price ratios. The number of layers on farms this summer is slightly above a year ago and probably will continue above a year earlier this fall and winter.

The number of milk cows on farms, which has declined at an annual average rate of about 3 percent during the past 10 years, is expected to decline

further in 1964-65. While the rate of feeding per animal unit has declined during the past 2 years the quantity of feed fed per cow has continued to increase. So far in 1963-64, the rate of feeding per cow has averaged 5 percent higher than in the same period of 1962-63.

Hay Supply for 1964-65
Down Slightly

The 1964-65 hay supply was estimated on the basis of August 1 indications at 136 million tons, 3 percent below 1963-64 and also a little below the 1958-62 average. The 1964 crop, estimated at 116 million tons, is slightly below a year earlier and the May 1 carryover was about 3 million tons less. The number of roughage-consuming animal units has been expanding for several years while hay supplies have been comparatively stable. This has resulted in a decline in the supply of hay per animal unit from 1.58 tons in 1958-59 to 1.36 in 1963-64. The consumption of hay per animal unit also has declined in recent years and in 1963-64 was about 5 percent below the 1958-62 average (table 4).

The slight reduction in the hay crop this year was due to lower yield per acre, which a little more than offset a 1 percent increase in the harvested acreage. Prospects were generally good for hay in most Midwestern and Western States. In most of the Midwestern States the crop is near or above average. Principal exceptions are Illinois, Minnesota, Nebraska, and Kansas where production was indicated to be 8 to 11 percent below the 1958-62 average. Indicated production in most Southern States is above last year, but in a number of these States the prospective crop is again below average. Prospective production is above average in nearly all Western States, although dry weather reduced hay production and pasture conditions in areas of Arizona, Colorado, New Mexico, and California.

Pastures have again been below average this summer, although about as good as they were in 1963. Pasture conditions on August 1 were generally good in the Eastern Corn Belt, the South Atlantic States and Western areas of the country. But dry weather in scattered areas from the Mid-Atlantic States to the Southwest resulted in below average conditions. For the entire country, pastures averaged 69 percent of "normal" on August 1, 14 percentage points below the 1958-62 average for that date; and 2 percent lower than a year ago.

CURRENT SITUATION

Feed Grain Prices Below
A Year Earlier

Feed grain prices are a little below a year earlier this summer, after averaging above the 1962-63 level during the first 9 months of the 1963-64 feeding year. While feed grain prices have advanced seasonally since last fall, they have not kept pace with the sharp rise that occurred in 1962-63. The index of prices received by farmers rose 9 percent from November to June, which now appears to be the high point for the 1963-64 feeding year. Prices

Table 4.--Hay supply and disappearance per animal unit,
United States, average 1958-62, annual 1957-64 1/

Year beginning May	Production	Carryover May 1	Total supply	Disap- pearance	Roughage- consuming animal units <u>1/</u>	Supply per animal unit	Disappear- ance per animal unit
	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>Thousands</u>	<u>Tons</u>	<u>Tons</u>
Average 1958-62	117,540	22,025	139,565	118,158	96,118	1.45	1.23
1957	120,043	17,557	137,600	111,402	90,537	1.52	1.23
1958	120,100	26,198	146,298	120,757	92,516	1.58	1.31
1959	110,978	25,541	136,519	119,418	94,750	1.44	1.26
1960	118,236	17,101	135,337	112,063	95,578	1.42	1.17
1961	116,819	23,274	140,093	122,079	97,417	1.44	1.25
1962	121,566	18,014	139,580	116,472	100,247	1.39	1.16
1963 <u>2/</u>	116,525	23,108	139,633	119,938	102,528	1.36	1.17
1964 <u>3/</u>	115,945	19,695	135,640				

1/ Roughage-consuming animal units fed annually. 2/ Preliminary. 3/ Based on August 1 indications.

Table 5.--Hay: Production by regions, average 1958-62,
annual 1957-64

Year	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>	<u>1,000 tons</u>
Average 1958-62	12,390	23,210	39,939	5,797	11,520	24,684	117,540
1957	11,624	23,298	43,631	5,238	11,108	25,144	120,043
1958	12,981	21,896	41,780	6,480	12,269	24,694	120,100
1959	12,497	23,200	34,910	5,567	10,924	23,880	110,978
1960	13,114	23,987	40,208	5,599	11,228	24,100	118,236
1961	13,322	22,977	37,743	6,015	12,064	24,698	116,819
1962	10,037	23,989	45,054	5,325	11,112	26,049	121,566
1963 <u>1/</u>	11,712	22,605	39,400	4,522	11,777	26,509	116,525
1964 <u>2/</u>	11,593	23,444	37,906	5,152	11,337	26,513	115,945

1/ Preliminary.

2/ Based on August 1 indications.

Table 6.--Feed grains: Prices received by farmers
and loan rates, 1958-64

Item	Unit	1958	1959 <u>1/</u>	1960 <u>1/</u>	1961	1962	1963 <u>2/</u>	1964
<u>Corn</u>								
Season av. price	Dol. bu.	1.12	1.04	.997	1.08	1.10	1.09	
Loan rates	"	<u>3/</u> 1.36	1.12	1.06	<u>4/</u> 1.20	<u>4/</u> 1.20	<u>4/</u> 1.07	<u>4/</u> 1.10
<u>Oats</u>								
Season av. price	"	.578	.646	.598	.640	.624	.627	
Loan rates	"	.610	.500	.500	<u>4/</u> .620	<u>1/</u> .620	<u>1/</u> .65	<u>1/</u> .65
<u>Barley</u>								
Season av. price	"	.900	.860	.838	.981	.915	.901	
Loan rates	"	.930	.770	.770	<u>4/</u> .930	<u>4/</u> .930	<u>4/</u> .82	<u>4/</u> .84
<u>Sorghum grain</u>								
Season av. price	Dol. cwt.	1.78	1.53	1.49	1.80	1.82	1.74	
Loan rates	"	1.83	1.52	1.52	<u>4/</u> 1.93	<u>4/</u> 1.93	<u>4/</u> 1.71	<u>4/</u> 1.77

1/ Support prices available to all producers. 2/ Season average prices preliminary. 3/ Support rates for producers who planted within their acreage allotments. In 1958 there was a basic support of \$1.06 per bushel to noncompliers in the commercial area. 4/ Available to producers participating in the Feed Grain Program. Price supports were comprised of loans and price support payments in 1963 and 1964. In 1963, the corn price support was \$1.25 per bushel and the payment 18 cents; barley price support 96 cents per bushel, payment 14 cents; sorghum grain loan \$2.00 per cwt., payments 29 cents; oat support price 65 cents, no price support payment. In 1964, the support prices are the same as in 1963 but the price support payments were reduced as follows: corn 15 cents per bushel; barley 12 cents per bushel and sorghum grain 23 cents per cwt.

Table 7.--Prices of specified feed grains and byproduct feeds, wholesale
July 1964, with comparisons

Feed	Unit	July			July 1964 as a percentage of -	
		Average	1963	1964	Average	1963
		1958-62			1958-62	
		Dol.	Dol.	Dol.	Pct.	Pct.
Corn, No. 3 Yellow <u>1/</u>	Bu.	1.21	1.32	1.22	101	92
Oats, No. 2 White <u>2/</u>	Bu.	.664	.648	.620	93	96
Barley, No. 3 <u>2/</u>	Bu.	1.17	1.05	1.08	92	103
Milo, No. 2 Yellow <u>3/</u>	Cwt.	2.04	2.07	2.16	106	104
Soybean meal, 44 percent <u>4/</u>	Ton	62.30	72.00	65.80	106	91
Cottonseed meal, 41 percent <u>5/</u>	Ton	61.10	69.80	56.20	92	81
Linseed meal, 32-36 percent <u>2/</u>	Ton	59.60	68.30	51.50	86	75
Gluten feed, 21 percent <u>1/</u>	Ton	34.70	39.80	38.50	111	97
Meat meal, 50 percent <u>1/</u>	Ton	91.60	95.20	81.60	89	86
Fish meal, 60 percent <u>6/</u>	Ton	117.50	127.00	126.50	108	100
Wheat bran <u>2/</u>	Ton	30.00	33.30	31.40	105	94
Wheat middlings <u>2/</u>	Ton	33.20	36.70	33.10	100	90
Molasses, blackstrap <u>7/</u>	Ton	27.00	39.00	23.94	89	61

1/ Chicago. 2/ Minneapolis. 3/ Kansas City. 4/ Decatur. 5/ Memphis. 6/ Buffalo, f.o.b. seaboard. 7/ New York.

Table 8.--Feed grains: Average wholesale prices, by weeks,
May-August, 1963 and 1964 ^{1/}

		Corn, Yellow, Chicago						Oats, No. 2 Minneapolis	Barley, No. 3: Minneapolis	Milo, No. 2 Kansas City			
Period		1963			1964								
		No. 2	No. 3	No. 5	No. 2	No. 3	No. 5	1963	1964	1963	1964	1963	1964
		Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per bu.	Dol. per cwt.	Dol. per cwt.
May	8	1.23	1.22	1.19	1.30	1.28	1.28	.699	.645	1.19	1.15	2.03	2.08
	15	1.23	1.23	1.20	1.29	1.28	1.25	.686	.670	1.18	1.16	2.03	2.05
	22	1.24	1.24	1.20	1.29	1.28	---	.677	.666	1.16	1.17	2.04	2.06
	29	1.25	1.25	1.21	1.28	---	---	.693	.650	1.14	1.17	---	2.10
June	5	1.28	1.26	1.23	1.29	1.24	1.24	.694	.651	1.15	1.14	2.04	2.10
	12	1.30	1.29	1.27	1.27	1.26	1.24	.693	.640	1.18	1.11	2.06	2.14
	19	1.31	1.30	1.27	1.27	1.25	---	.688	.636	1.14	1.09	2.12	2.14
	26	1.33	1.31	1.28	1.27	---	---	.679	.634	1.09	1.08	2.07	2.15
July	3	1.34	1.33	1.30	1.27	1.27	1.26	.681	.644	1.11	1.08	2.07	2.14
	10	1.34	1.33	1.31	1.26	---	---	.678	.641	1.11	1.10	2.06	2.16
	17	1.34	1.32	1.29	1.24	---	---	.650	.618	1.12	1.10	2.08	2.16
	24	1.32	1.30	1.27	1.23	---	---	.631	.607	1.04	1.08	2.07	2.18
	31	1.30	1.28	1.24	1.23	1.22	1.22	.623	.622	.99	1.08	2.04	2.14
August	7	1.33	1.32	1.29	1.25	1.23	1.24	.633	2/	1.04	2/	2.00	2.09

^{1/} Average prices weighted by carlot sales. ^{2/} Not available at time of printing.Table 9.--Prices of specified byproduct feeds, by weeks,
May-August, 1963 and 1964 ^{1/}

Period	Soybean meal, 44 percent protein, Decatur		Cottonseed meal, 41 percent protein, Memphis		Meat meal, 50 percent protein, Chicago		Fish meal, 60 percent protein, Buffalo ^{2/}		Wheat middlings, Minneapolis		Gluten feed, 21 percent protein, Chicago	
	1963		1964		1963		1964		1963		1964	
	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton
May 12	69.00	65.50	65.00	52.00	85.00	85.00	127.00	123.00	32.00	29.50	37.00	39.00
19	67.00	64.50	65.00	51.00	85.00	82.50	127.00	122.00	33.50	30.00	37.00	39.00
26	68.00	64.50	65.00	52.00	83.75	80.00	127.00	122.00	33.00	27.50	37.00	39.00
June 2	69.00	64.00	64.00	52.50	83.75	77.50	127.00	122.00	32.00	26.50	37.00	37.00
9	69.50	66.00	65.00	54.00	86.25	77.50	127.00	122.00	34.00	28.50	37.00	35.00
16	72.00	66.50	68.00	55.00	88.75	78.25	127.00	122.00	36.00	33.50	39.00	35.00
23	71.00	67.50	70.00	54.50	90.00	80.00	127.00	122.00	38.00	40.00	39.00	37.00
30	74.75	68.50	70.00	54.00	95.00	80.00	127.00	126.00	37.50	34.00	39.00	39.00
July 7	72.00	69.00	70.00	54.00	96.25	82.50	127.00	126.00	37.00	34.00	39.00	39.00
14	70.50	66.00	70.00	56.00	95.00	82.50	127.00	126.00	35.00	32.00	39.00	39.00
21	71.00	65.00	68.50	57.00	93.75	81.25	127.00	127.00	37.00	35.50	41.00	37.00
28	72.00	63.00	70.50	58.00	96.25	80.25	127.00	127.00	37.00	31.00	41.00	39.00
August 4	76.00	63.00	70.00	60.00	97.50	77.75	127.00	130.00	36.50	31.50	41.00	39.00
11	73.00	63.00	70.00	62.00	100.00	77.50	127.00	130.00	36.00	31.50	41.00	39.00

^{1/} Wholesale prices, bulk. Prices are for Tuesday of each week.^{2/} F.o.b. seaboard.

declined 3 percent from June to July, and in July averaged 5 percent lower than a year earlier. During October-July this year, feed grain prices have averaged 3 percent higher than in the same period of 1962-63 and 11 percent above the postwar low of 1960-61.

As was the case in 1962-63, much of the seasonal rise in feed grain prices this year has been in corn. Corn prices rose 14 cents per bushel from November to June when the average price received by farmers reached \$1.16 per bushel, the same level as a year earlier and 9 cents above the 1963 loan rate. In July, prices declined to \$1.12 per bushel, 7 cents lower than a year earlier. The much larger supply of "free" corn on hand this summer is a major factor in the weakness in corn prices. Corn prices are expected to average somewhat lower this summer than last year when the tightening of "free" corn supplies pushed prices up to the 1962 loan rate of \$1.20 per bushel during July-September. During October-July, corn prices averaged 4 percent higher than a year earlier and 11 percent above 2 years ago. This is more than the increases in other feed grains and corn prices are not as low in relation to other feeds as in 1961-62.

Feed grain prices probably will decline during the next few months with the harvest of the 1964 crops. This fall and winter they may average near that period of the 1963-64 season. Price supports for 1964 feed grains will be at the same levels as in 1963; loan levels will be a little higher but payments a little lower. Increases in loan rates this year, together with prospects for a little smaller feed grain production, will give support to feed grain prices in 1964-65. On the other hand, the weakness in demand, which developed in 1963-64, probably will continue into 1964-65.

Table 10.--Feed grains: National average price supports
for 1963 and 1964 crops

Feed grain	Unit	1963			1964		
		Loan	Price	Total	Loan	Price	Total
		rate	support	support	rate	support	support
			payment			payment	
		Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Corn	Bu.	1.07	0.18	1.25	1.10	0.15	1.25
Oats	Bu.	.65	---	.65	.65	---	.65
Barley	Bu.	.82	.14	.96	.84	.12	.96
Sorghum grain	Cwt.	1.71	.29	2.00	1.77	.23	2.00

As was the case in 1963-64, CCC cannot sell feed grains against the certificate pool in 1964-65 at less than the loan rate plus carrying charges. This will mean that CCC sale prices will be a little higher in 1964-65 than in 1963-64.

The carrying charge markups for determining the August formula prices over July prices were increased to 1 1/2 cents per bushel this year for barley and oats, 1/2 cent more than in 1963; and to 2 1/2 cents per cwt. for sorghum grain, also up 1/2 cent from a year earlier. The quantity of feed grain sold from CCC stocks and the quantity placed under price support in 1964-65 are expected to continue well below the high levels reached in 1961-62 and 1962-63. In those 2 years, feed grain prices averaged below loan rates. In 1963-64, prices of each of the 4 feed grains averaged near or above loan rates.

Livestock-Feed Price Ratios
Less Favorable in 1963-64

Rising feed prices and declining prices of livestock and livestock products during the past 2 years have resulted in less favorable livestock-feed price ratios for livestock and poultry producers. While feed price ratios improved some from June to July, the July ratios were still generally below average (table 1). In October-July 1963-64, the index of prices of livestock and livestock products was 6 percent lower than in that period 2 years ago, while feed grain prices averaged 6 percent higher. In April-June this year, the livestock and livestock product price index fell below the feed grain index (both adjusted to the 1951-60 average) for the first time since 1957. The decline in livestock prices in relation to feed in the last 2 years follows a 5-year period from 1958 to 1962 when feed prices were generally low in relation to prices of livestock and livestock products.

The decline in livestock prices, relative to feed prices, has been most pronounced for cattle and hogs. The decline in slaughter cattle prices, along with increasing corn prices, reduced the beef steer-corn price ratio at Chicago from a very favorable level of 23.3 in October-July 1961-62 to 18.2 in that period of 1963-64. This was the lowest level for the beef-steer corn price ratio since 1956-57 and was well below the generally favorable ratios ranging from 22 to 25 for the feeding years 1958-59 through 1962-63. The low price of beef steers in relation to corn has tempered the upward trend in cattle feeding.

The hog-corn price ratio also has declined rather sharply during the past 2 years. In the first 10 months of 1963-64, the average price received by farmers for hogs was equivalent to only 13.1 bushels of corn, the lowest ratio for that period in 8 years and much below the favorable ratio of 16.6 in the 1961-62 feeding year. With a less favorable hog-corn ratio the pig crop was reduced during the past year and a further reduction in the pig crop is in prospect for 1964-65.

The egg-feed price ratio during October-July this year was slightly below a year earlier, and a little below average for the period. The broiler-feed price ratio, which has trended downward for several years, declined further in 1963-64. During October-July, the price of broilers was equivalent to only 2.9 pounds of feed, compared with 3.1 in that period last year and the 1958-62 average of 3.4. The milk-feed and the milkfat-feed ratios also have declined some during the past 2 years, although in July they are still a little above the 1953-62 average.

Feed Grain Disappearance in April-June
Same as a Year Earlier

Disappearance of feed grains in April-June amounted to about 35 million tons or about equal to the record disappearance in that quarter of 1963. Domestic disappearance did not decline as much this year from the second to third quarter as in 1962-63, and April-June domestic use was 2 percent higher than a year earlier. Exports, however, were 16 percent below the very heavy movement in April-June last year, although they were about 11 percent above the 1958-62 average. During October-June this year, domestic disappearance of feed grains totaled 103.5 million tons, about 4 percent less than in the first 9 months of 1962-63. Exports for the 9 months, however, reached a record high of 14.2 million tons, about a million above last year. Domestic use of feed grains in the 1963-64 marketing year is now expected to total about 131 million tons, about 4 million tons less than last year but about the same as the 1958-62 average. If July-September exports are about the same as the 3.5 million tons exported in that period last year, total for 1963-64 would be a record high at close to 18 million tons.

Domestic disappearance of corn during April-June totaled about 809 million bushels, slightly larger than last year and about 6 percent above the 1958-62 average. While corn exports were much heavier than a year earlier during October-March, April-June exports declined 20 million bushels from the record 130 million in April-June of last year. Domestic consumption of corn in 1963-64 will probably total a little under 3.4 billion bushels, about 5 percent less than in 1962-63. A record export of about 475 million bushels is in prospect, which would bring total disappearance to around 3,850 million bushels, down a little more than 100 million bushels from the heavy disappearance in the 2 preceding years.

Domestic use of sorghum grain has been at a record pace so far during 1963-64 and probably will reach a total of 475 million bushels for the entire marketing year, up nearly 20 percent from a year earlier and a new record. This, together with the prospective export of about 100 million bushels, would bring the total disappearance in 1963-64 to nearly equal the 1963 crop and little change in carryover for next October 1 is in prospect. Disappearance of oats in April-June was about 5 percent below a year earlier, giving a total for the 1963-64 marketing year of about 944 million bushels, 8 percent less than a year earlier and the first time since 1936 that total utilization has been below a billion bushels. Domestic use and exports of barley in April-June were above a year earlier and total disappearance for 1963-64 was estimated at 427 million bushels, a little larger than in 1962-63, but 5 percent below the 1958-62 average.

July Stocks of Feed Grains
Up 7 Million Tons

Stocks of the 4 feed grains on July 1 totaled about 94 million tons, 7 million more than on that date last year. Stocks under loan and owned by CCC totaled 62.5 million tons, slightly smaller than a year earlier, while "free" stocks totaling 31.4 million tons were nearly 8 million larger. The larger stocks on July 1 this year indicate that carryover stocks into 1964-65 will total around 70 million tons, 7 million more than was carried over into 1963-64.

Larger corn stocks accounted for much of the increase in July 1 feed grain stocks. July 1 stocks of corn totaled 2,345 million bushels, 230 million more than a year ago (table 11). Stocks of corn outside the price support program are much larger than a year earlier, while stocks under loan and owned by CCC are slightly smaller. Stocks not under price support on July 1 totaled 866 million bushels, nearly adequate to take care of domestic use, exports, and "free" carryout on October 1. This contrasts with last year's situation when "free" stocks on July 1 totaled only 624 million bushels, about 250 million bushels below total July-September requirements including "free" stocks on October 1. Disappearance of corn during July-September last year was 799 million bushels and "free" carryover stocks were estimated at about 80 million. The "free" stocks on October 1 this year are expected to be considerably larger than a year ago.

Stocks of sorghum grain totaled 715 million bushels on July 1, 21 million more than on that date last year. Stocks outside the price support program were much above comparable stocks on July 1 last year. The carryover of oats on

Table 11 .--Feed grains: Total stocks and quantities under loan and owned by CCC, July 1, 1963 and 1964

Item	Corn		Oats		Barley		Sorghum grain	
	1963	1964	1963	1964	1963	1964	1963	1964
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
<u>Under loan and owned by CCC</u> <u>1/</u>								
Old grain resealed	413	421	6	15	6	11	13	16
Under price support from preceding crop <u>2/</u>	573	309	18	24	16	9	12	16
Owned by CCC	505	749	17	28	38	29	661	642
Total	1,491	1,479	41	67	60	49	686	674
Not under price support <u>3/</u>	624	866	233	248	87	84	8	41
Total U. S. stocks	2,115	2,345	274	315	147	133	694	715

1/ Based on reports of Agricultural Stabilization and Conservation Service.

2/ Total quantity placed under loan and purchase agreement less repayments through June 30.

3/ Residual

July 1, totaling 315 million bushels, 41 million more than a year earlier. This included 67 million under loan and owned by CCC, 26 million more than a year ago. The barley carryover on July 1 totaled 133 million bushels, 14 million less than on that date in 1963, with most of this reduction in stocks owned by CCC and under loan.

Feed Grain Exports in 1963-64
Expected to Set Record

Exports of feed grains in the current marketing year are expected to exceed the high levels of 1961-62 and 1962-63. During October-June, 14.2 million tons were exported, a record for that period and 8 percent larger than in the corresponding period last year. If corn and sorghum grain exports during July-September are about the same as in that quarter of 1962-63, total feed grain exports will reach a record high of about 18 million tons.

Corn exports (including grain equivalent of products) for the 1963-64 marketing year are expected to total around 475 million bushels, nearly 60 million more than in 1962-63. Exports in the first 9 months of the marketing year amounted to about 380 million bushels, 18 percent more than in that period a year earlier. Sorghum grain exports during October-June totaled 78 million bushels, compared with 92 million the year before. Exports for the entire 1963-64 feeding year are expected to total around 100 million bushels, which would be near the 1958-62 average, but below the record 113 million exported in 1962-63.

Oat exports during the 1963-64 marketing year ended June 30 totaled 6 million bushels, down sharply from the 25 million exported in 1962-63 and the smallest since 1953-54. Exports of barley totaled 70 million bushels, 4 percent above a year earlier.

Prospects Less Favorable for 1964 Canadian
Feed Grain Crops

Canadian oats and barley crops suffered during July from hot, dry weather over wide areas of the Prairie Provinces. Prospects in most of the important grain producing regions are less favorable than in 1963 when per acre yields of oats and barley were the highest on record. The 1964 total Canadian acreage of oats was estimated on August 1 at 9.7 million acres, 9 percent less than in 1963 and about the same as the 1958-62 average. The 5.5 million acres of barley to be harvested was 11 percent below the 1963 acreage and 22 percent below the 5-year average. The first official Canadian estimate of the 1964 crops will be released September 4.

Larger Argentine Corn Supply
for 1964-65

The Argentine corn supply for 1964-65 is estimated at 215 million bushels, 30 million more than in 1963-64. The 1964 crop was estimated in July at 210 million bushels, 30 million bushels above the 1963 crop. The April 1 carryover was placed at 5 million bushels, the same as a year earlier. The larger supply

for the current April-March marketing year is expected to result in exports continuing near the high level of the past 2 years. Argentine exports totaled 113 million bushels in 1962-63, and 97 million in 1963-64.

South African Corn Supply
Down 15 Percent

The supply of corn in South Africa for the 1964-65 (May-April) marketing year is estimated at 232 million bushels, about 15 percent below the big supply in 1963-64. The crop, estimated in July at about 200 million bushels would be 32 million less than in 1963 and the May 1 carryover of 32 million was down 11 million bushels. Exports during May-April 1964-65 will probably be around 20 percent below the big exports of 111 million bushels in 1963-64.

High-Protein Feed Consumption Down
Slightly from a Year Earlier

High protein feed supplies, after increasing steadily in recent years, are expected to decline about 2 percent in 1963-64 from the record 16.6 million tons fed in 1962-63. This decline results entirely from a cut in soybean meal feeding, which is expected to be down to about 9.0 million tons, 550,000 tons less than was fed in 1962-63. More than half of this reduction, however, will be made up by larger supplies of other high-protein feeds, especially tankage, meat meal, fish meal, and gluten feed and meal. The number of high-protein feed-consuming animal units fed in 1963-64 is estimated at 145.9 million, down slightly from last year. Based on these early prospects the quantity of high protein feeds fed per animal unit in 1963-64 would be close to the 226 pounds in 1962-63.

Domestic and foreign demand for high-protein feeds weakened some in 1963-64 from the very strong demand in 1962-63. This weakness has resulted in lower prices for a number of these feeds. There also has been a shift in domestic consumption from soybean meal to other protein feeds which have been relatively cheaper. Domestic consumption of soybean meal this year is estimated at 9.0 million tons, 6 percent less than in 1962-63. All other high-protein feeds, in terms of soybean meal equivalent, increased about 4 percent to 7.3 million tons.

Oilmeal Feeding Down 4 Percent
in October-June

Feeding of oilmeals to livestock and poultry during October-June totaled 9,458,000 tons, a decline of 4 percent from the 9,820,000 fed in the corresponding period of 1962-63. The decline was largely due to a reduction in soybean meal feeding. Combined feeding of cottonseed meal, linseed meal, peanut meal, and copra meal in October-June totaled 2,586,000 tons, about 60,000 more than a year earlier. For the entire 1963-64 feeding year, oilmeal feeding is expected to total about 12,125,000 tons, a decrease of about 500,000 or 4 percent from 1962-63.

Soybean meal feeding during 1963-64 is expected to decline about 6 percent from the record 9,556,000 tons fed in 1962-63. During October-June the quantity fed amounted to 6,872,000 tons, compared with about 7,297,000 the year

Table 12.--Oilseed cake and meal: Supply and distribution, United States, year beginning October, 1962-63 and 1963-64

Oilseed meal	Supply				Distribution			
	Stocks	Production	Imports	Total	Feed	Other uses	Exports	Stocks
	October 1/ 1/	1/	1/	1/	1/	2/ 2/	1/	Sept. 30
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
<u>1962-63</u>								
Soybean	94	11,127	0	11,221	9,556	30	1,476	159
Cottonseed	100	2,710	42	2,852	2,577	30	85	160
Linseed	7	371	1	379	320	---	52	7
Peanut	1	68	0	69	67	---	---	2
Copra	3/	101	9	110	110	---	---	3/
Total	202	14,377	52	14,631	12,630	60	1,613	328
<u>1963-64 4/</u>								
Soybean	159	10,300	0	10,459	9,000			
Cottonseed	160	2,750	40	2,950	2,625			
Linseed	7	360	---	367	330			
Peanut	2	80	---	82	80			
Copra	3/	90	---	90	90			
Total	328	13,580	40	13,948	12,125	60	1,400	363

1/ Stocks at processors' plants.

2/ Estimated quantities of soybean meal used for industrial purposes and cottonseed meal used for fertilizer on farms of cotton growers.

3/ Not reported.

4/ Forecast (except for stocks)--based on indications in August 1964.

Table 13.--Tankage and meat meal: Production, United States, by months, 1961-63 1/

Period	1961-62			1962-63			1963-64 2/		
	Tankage	Meat meal	Total	Tankage	Meat meal	Total	Tankage	Meat meal	Total
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
October	32.3	112.4	144.7	34.8	128.8	163.6	30.0	135.6	165.6
November	34.1	117.5	151.6	33.0	120.4	153.4	30.2	123.2	153.4
December	32.2	109.0	141.2	31.8	114.5	146.3	29.3	128.6	157.9
January	32.5	114.7	147.2	30.7	127.9	158.6	30.7	137.2	167.9
February	31.7	100.6	132.3	28.5	111.5	140.0	28.2	123.9	152.1
March	33.1	110.3	143.4	28.7	115.3	144.0	27.8	126.5	154.3
April	30.3	103.8	134.1	28.5	115.7	144.2	27.1	133.8	160.9
May	34.9	115.2	150.1	30.8	130.6	161.4	27.0	130.2	157.2
June	33.1	114.3	147.4	28.5	122.9	151.4	26.4	135.1	161.5
July	31.6	118.8	150.4	28.0	125.4	153.4			
August	34.8	130.8	165.6	29.7	133.0	162.7			
September	31.2	117.4	148.6	27.4	125.7	153.1			
Total	391.8	1,364.8	1,756.6	360.4	1,471.7	1,832.1			

1/ Includes byproducts of livestock and poultry processing, excluding feather meal.

2/ Preliminary.

Table 14.--Byproduct feeds: Estimated use for feed, year beginning October, average 1958-62, annual 1958-63 1/

Item	Average 1958-62	1958	1959	1960	1961	1962 <u>2/</u>	1963 <u>3/</u>
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
HIGH-PROTEIN FEEDS							
Oilseed cake and meal							
Soybean cake and meal	9,002	8,938	8,450	8,837	9,232	9,556	9,000
Cottonseed cake and meal	2,445	2,198	2,330	2,498	2,622	2,577	2,625
Linseed cake and meal	350	417	304	378	330	320	330
Peanut cake and meal	66	75	60	75	54	67	80
Copra cake and meal	138	146	133	162	138	110	90
Total	12,001	11,774	11,277	11,950	12,376	12,630	12,125
Animal proteins							
Tankage and meat meal	1,687	1,480	1,664	1,695	1,760	1,836	1,900
Fish meal and solubles	558	518	448	545	622	655	750
Commercial dried milk products	169	174	153	167	165	186	180
Noncommercial milk products	715	793	737	726	679	641	610
Total	3,129	2,965	3,002	3,133	3,226	3,318	3,440
Grain protein feeds							
Gluten feed and meal	1,162	1,046	1,142	1,098	1,237	1,285	1,390
Brewers' dried grains	249	231	239	249	266	261	275
Distillers' dried grains	359	342	359	352	380	362	375
Total	1,770	1,619	1,740	1,699	1,883	1,908	2,040
OTHER BYPRODUCT FEEDS							
Wheat millfeeds	4,846	4,698	4,833	4,874	4,932	4,897	5,150
Rice millfeeds	290	236	267	284	315	347	390
Dried and molasses beet pulp	803	679	746	790	853	947	1,050
Alfalfa meal	1,455	1,379	1,357	1,436	1,513	1,589	1,550
Fats and oils <u>4/</u>	231	238	219	221	231	244	<u>5/</u> 330
Miscellaneous byproduct feeds <u>6/</u>	3,720	3,600	4,000	3,600	3,600	3,800	3,800
Total	11,345	10,830	11,422	11,205	11,444	11,824	12,270
Total all byproduct feeds	28,245	27,188	27,441	27,987	28,929	29,680	29,875

1/ Estimated use for feed is derived by adding production and imports; deducting exports, utilization for food and other nonfeed uses, and adjusting for changes in stocks of cottonseed, soybean, linseed, peanut and copra cakes and meals, brewers' and distillers' dried grains and alfalfa meal.

2/ Preliminary.

3/ Preliminary estimates based on indications in August 1964.

4/ Includes inedible tallow and grease for the years 1957-61, beginning 1962 includes all fats and oils used in feed, based on reports from renderers.

5/ Not comparable with earlier years. Beginning January 1964 based on reports from feed manufacturers.

6/ Estimated quantities of hominy feed, oat millfeeds, molasses and screenings available for livestock feeding.

before. Despite the recent decline in soybean meal prices, consumption during the next few months is expected to continue somewhat below that period of last year. The reduced consumption of soybean meal is at least partly the result of the relatively high soybean meal prices during most of the 1963-64 feeding year and to unfavorable livestock-feed price ratios. Production in the current feeding year is expected to total about 10,300,000 tons, 800,000 below output in 1962-63. Part of this reduction will be offset by smaller exports. Stocks of soybean meal from October through May were much higher than a year earlier, but dipped sharply during June. July 1 stocks at crushing plants totaled 141,000 tons compared with 187,000 a month earlier and 153,000 on July 1, 1963.

Feeding of cottonseed meal during October-June totaled 2,194,000 tons compared with 2,129,000 in that period of 1962-63. Production for 1963-64 is expected to total 2,750,000 tons, up slightly from a year earlier. Monthly cottonseed meal stocks at crushers plants have been running substantially higher than in 1962-63. The 305,000 tons of stocks on July 1 were 6 percent below a month earlier, but more than 40 percent above July 1963. Domestic consumption of linseed meal is expected to be about the same as the 320,000 consumed in 1962-63. Peanut meal feeding probably will be about a fifth larger than last year's 67,000 tons, while copra meal may be down 15 to 20 percent.

Soybean Meal Exports Below 1962-63 Record

Soybean meal exports for the current feeding year are expected to total around 10 to 15 percent below the record 1.5 million tons exported in 1962-63. During October-June, exports totaled 1,019,000 tons compared with 1,175,000 in the same period of 1961-62. Exports to the Common Market Countries totaled 498,000 tons during October-June, 94,000 tons less than in that period a year earlier. Exports to the EEC were 49 percent of the total for the U. S. in 1963-64, about the same as in 1962-63, but down from the 58 percent in 1961-62. The major countries importing U. S. soybean meal in 1962-63 were Canada, Netherlands, France, West Germany, and Spain--receiving 995,000 tons or about two-thirds of the U. S. total. So far this year, these countries have imported 636,000 tons or 62 percent of the total compared with 820,000 or 70 percent in the 9-month period of 1962-63. Japan, Hungary, Yugoslavia, and Switzerland showed substantial increases in imports of U. S. soybean meal over last year.

Cottonseed meal exports in the current feeding year are expected to decline 35,000 tons from the 85,000 exported in 1962-63. The 18,000 tons of linseed meal exported in October-June was about half the quantity shipped a year earlier. Exports for the entire year may only be about half the 52,000 tons exported during 1962-63.

Supplies of Most Other Byproduct Feeds Up in 1963-64

The total quantity of byproduct feeds, other than the oilseed meals, to be fed in 1963-64 is now estimated at 17,750,000 tons, 4 percent above the 1962-63 level. The quantity of tankage and meat meal available for feeding is estimated to be up 3 percent; fish meal, about 15 percent; gluten feed and meal, 7 percent; and wheat millfeeds, about 5 percent.

Since 1958, supplies of tankage and meat meal have risen steadily, with increases averaging about 75,000 tons annually. Production in the first 9 months of 1963-64 totaled 1,431,000 tons, 68,000 above a year earlier (table 13). Production of tankage and meat meal for the entire feeding year is now expected to reach 1,900,000 tons, 4 percent above 1962-63.

So far this year, increased imports of fish meal have much more than offset the decline in domestic production. During October-June domestic output totaled 155,000 tons, 24,000 less than a year earlier. Fish meal imports during October-June totaled 338,000 tons, an increase of about 118,000 over the corresponding period a year ago. Fish meal supplies for the 1963-64 feeding year are now expected to reach a record high of around 750,000 tons, 95,000 more than last year.

Gluten feed and meal available for feeding in the current feeding year is now expected to total nearly 1,400,000 tons compared with 1,285,000 a year earlier. From October through June, production totaled 1,023,000 tons, an increase of 83,000 over that period of 1962-63. Much of this increase is due to increased demand for corn sugar and syrup.

Wheat millfeed supplies in 1963-64 will likely be about 5 percent above last year's supply of 4,897,000 tons. This prospective increase would be due to both increased domestic production and imports. Wheat millfeed production during October-June was 3,858,000 tons, 6 percent more than in the same period of 1962-63. October-June imports totaled 173,000 tons, up sharply from the 62,000 in 1962-63.

High-Protein Feed Prices

During October-July, the wholesale price index of the 11 major high-protein feeds averaged 120 percent of the 1957-59 base, about the same as in those 10 months of 1962-63. The index of high-protein feed prices rose from October to January of the 1963-64 feeding year when it reached the highest level in nearly 10 years. From January to July it declined 15 percent to the lowest point of the 1963-64 season and 10 percent below July 1963. Prices of practically all the high-protein feeds were lower this July than last, ranging from 3 percent lower for gluten feed to 25 percent lower for linseed meal (table 7). Prices of animal proteins and grain proteins have leveled off in the past 4 months but in July, they averaged about 7 or 8 percent below a year earlier. Oilseed meal prices averaged about 10 percent lower.

Soybean meal prices at Decatur (44 percent protein) during October-July averaged \$71.90 per ton compared with \$70.50 in that period of 1962-63. Soybean meal prices have declined nearly \$12.00 per ton since January to \$65.80 per ton in July. This was \$6.20 lower than in that month of last year. Soybean meal prices have been above average in relation to most other protein feeds during 1963-64. This, together with generally weaker demand, has resulted in curtailed production and smaller domestic consumption and exports. Soybean meal prices for the entire 1963-64 season are expected to average slightly below the \$71.30 per ton of 1962-63.

In July, soybean meal prices averaged 106 percent of the 1958-62 average while cottonseed meal, linseed meal, and meat meal were all below average. In July, gluten feed prices were 11 percent above the 1958-62 average and fish meal prices were 8 percent higher.

GOVERNMENT PROGRAMS AND PRICE SUPPORT ACTIVITY

Provisions of 1965 Wheat Program Announced

Provisions of the 1965 Wheat Program, announced by the U. S. Department of Agriculture on August 3, are basically the same as for the 1964 program. The major difference is the provision for acreage substitution between wheat and feed grains. The national average price support loan will be \$1.25 per bushel, 5 cents less than this year, while domestic certificates will be increased to 75 cents per bushel and the export certificates to 30 cents per bushel, both 5 cents higher than in 1964. The signup period for the 1965 Wheat Program is planned for August 24 through October 2. Provisions of the 1965 Feed Grain Program, which will operate under the same legislative authority as in 1964, will be announced later.

Farmers who have both a wheat acreage allotment and a feed grain base and who sign up for both programs will be eligible to use the substitution provision of the 1965 program. Such a producer can either grow wheat on all or part of his permitted feed grain acreage or feed grains on all or part of the permitted wheat acreage. A producer who plants feed grains on wheat allotment acreage may put this feed grain production under loan, but he will not be eligible for feed grain program price support payments on this production, nor will he receive additional certificates for wheat grown in lieu of feed grains. A producer not eligible for the benefits of both programs may still obtain the benefits of the program for which he is eligible.

A wheat producer may also request that a separate oat-rye base acreage be established for his farm. Thus, a cooperator in the wheat program may grow wheat on oats-rye base acres (minus diverted acreage) in addition to being able to grow wheat on all or part of the permitted feed grain acreage. When this option is exercised, corn, grain sorghum, or barley cannot be grown on the oats-rye base or on the wheat allotment acreage. The purpose of establishing an oats-rye base is to extend benefits to producers who mainly grow wheat, oats, and rye. If a producer requests but does not use this option, eligibility for program benefits will be determined as if the oats-rye option had not been requested.

Wheat producers may qualify for certificates and price support loans by planting within their 1965 allotment and devoting to conserving uses an acreage equal to 11.11 percent of that allotment. To qualify for diversion payments, participants will need to divert at least an additional 10 percent of his allotment acreage. Maximum diversion for payment can be 20 percent of the allotment or enough additional acreage within the wheat allotment to make a total of 15 acres. Payment rate per acre for the additional diversion will be 50 percent of the county basic price support loan times the farm normal yield.

Producers who wish to sign up in both the wheat and feed grain programs may do so by increasing the acreage of cropland devoted to a conservation use not less than the total of the acreage signed up to be diverted under both programs. Diversion payments will be computed on the basis of the actual crop or crops reduced. (For instance, if wheat is grown in lieu of feed grains, diversion payments would be at the applicable feed grain crop rates.)

Diversion payments for the oats-rye option will be a percentage of the wheat diversion rate and will be announced with the 1965 Feed Grain Program.

Price Support Activity Down
Substantially in 1963-64

Farmers reduced the quantity of 1963 feed grains placed under price support in 1963-64 to 16.3 million tons, about a third less than in each of the 3 preceding years. The 395 million bushels of corn placed under price support was down sharply from the large quantities placed under the program in the crop years 1960, 1961 and 1962 (table 16). Farmers also placed substantially less sorghum grain and barley under price support, but a larger quantity of oats than in 1962-63.

The reduction in the quantity of feed grains placed under price support this year was due largely to a change in the Feed Grain Program. The 1963 support prices were made up of loan rates and price support payments. For this reason, the loan rates for corn, sorghum grain and barley were well below the 1962 loan rates, when the entire price support was provided through loans (table 10). Also, the CCC sale prices were generally higher in 1963-64, since feed grains could not be sold under the certificate pool at less than the loan rate plus carrying charges. This resulted in feed grain prices being much higher in relation to the loan rate this year than in 1962-63.

Farmers are redeeming more of the 1963 feed grains placed under loan than in 1962-63. Corn, sorghum grain, and barley prices have been above the loan rates this spring and summer. Through June, farmers had repaid their loans on 86 million bushels of corn, 12 million of barley, 6 million of sorghum grain and 5 million of oats, or a total of about 3 million tons. The total quantity of 1963 feed grains delivered to CCC will be much less than from the 1961 and 1962 crops, when deliveries totaled over 20 million tons each season.

CCC Sales of Feed Grains
Down Sharply from 1962-63

Based on weekly ASCS reports, October-July sales of feed grains by CCC, largely corn and sorghum grain, totaled 7.0 million tons, only a little over a fourth of the quantity sold in that period last year. This included 4.0 million tons purchased by domestic buyers and 3.0 million for exports. Through July of last year, 26.1 million tons were sold by CCC, including 22.7 million tons to domestic buyers and 3.4 million for export.

Corn and sorghum grain again made up a large share of total CCC sales. Corn sales by CCC during October-July totaled 139 million bushels. This was much less than the 707 million sold through July of 1962-63. Sorghum grain

Table 15.--Feed grains: Quantities placed under price support, from 1963 crop, deliveries to CCC and repayments through June 30, 1964

Grain	Placed under price support			Loans repaid through June 30	Quantities delivered to CCC through June 30		
	Loan	Purchase agreement	Total		Loan program	Purchase agreement	Total
	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	<u>bu.</u>	<u>bu.</u>	<u>bu.</u>	<u>bu.</u>	<u>bu.</u>	<u>bu.</u>	<u>bu.</u>
Corn	385,968	9,186	395,154	86,309	91	0	91
Oats	35,064	3,833	38,897	4,871	6,667	1,221	7,888
Barley	23,697	4,482	28,179	12,234	1,994	256	2,250
Sorghum grain	138,704	2,667	141,371	6,149	1,165	928	2,093

Compiled from reports of Agricultural Stabilization and Conservation Service.

Table 16.--Feed grains: Production and quantities placed under price support, United States, 1959-63

Crop of	Feed grain production	Quantity placed under price support 1/					Percentage of production	Delivered to CCC 2/ 3/
		Corn	Oats	Barley	Sorghum grain	Total		
		Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. tons	Pct.	Mil. tons
1959	149.6	529	8	41	115	19.2	12.8	15.8
1960	155.6	638	20	50	203	25.0	16.1	18.9
1961	140.6	659	21	44	196	25.3	18.0	23.7
1962	142.9	591	32	40	219	24.2	16.9	20.4
1963 4/	155.9	395	39	28	141	16.3	10.5	

1/ Placed under loan and purchase agreement. 2/ Includes deliveries from resale program and over-deliveries as determined by the final measurement of farm-stored grain when delivered to CCC. 3/ Partly estimated. Includes an allowance for deliveries from the resale program. 4/ Preliminary.

Compiled from reports of the Agricultural Stabilization and Conservation Service.

Table 17.--Corn and sorghum grain: CCC sales against Feed Grain Program certificate pools, by weeks, May-July 1963 and 1964

Week ending	Corn sales				Sorghum grain sales				Cumulative sales values	
	Weekly		Cumulative 1/		Weekly		Cumulative 1/		1962-63 2/	1963-64 3/
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64		
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 dol.	1,000 dol.
May 22	5,223	849	474,274	76,291	2,965	21	195,553	9,243	710,713	105,362
29	2,864	736	477,138	77,027	2,803	10	198,356	9,253	716,814	106,266
June 5	2,016	781	479,154	77,807	3,245	5	201,601	9,258	722,504	107,236
12	1,698	1,007	480,852	78,814	2,184	57	203,785	9,315	726,750	108,453
19	1,483	1,493	482,345	80,307	1,564	96	205,348	9,411	730,216	110,293
26	940	1,057	483,258	81,364	2,439	16	207,787	9,427	733,729	111,537
July 3	1,011	683	484,269	82,047	4/ 996	4/ 328	4/ 996	4/ 328	5/ 736,035	5/ 112,662
10	740	387	485,002	82,434	1,558	2,229	2,554	2,556	5/ 738,493	5/ 115,516
17	406	479	485,408	82,912	931	1,487	3,484	4,044	5/ 740,013	5/ 117,591
24	609	277	486,018	83,189	885	885	4,370	4,928	5/ 741,729	5/ 118,828
31	664	588	486,682	83,777	583	1,517	4,953	6,445	5/ 743,199	5/ 121,059

1/ Accumulative sales beginning July for sorghum grain and October for corn. In some weeks adjustments were made so the reported weekly sales do not necessarily add to the cumulative sales. 2/ Includes value of barley and oat sales. 3/ Includes barley; oats could not be sold against the pool after June 30, 1963. 4/ Beginning of sales against 1964 pool. 5/ Includes sorghum grain sales against 1962 and 1963 certificate pool in 1962-63 and against the 1963 and 1964 certificate pool in 1963-64.

Compiled from reports of the Agricultural Stabilization and Conservation Service.

sales through July amounted to 92 million bushels, less than half of the 215 million sold a year earlier. Sales of corn and sorghum grain against the 1963 certificate pool totaled 93 million bushels through July 1964, down sharply from the 698 million bushels sold in this period of 1962-63 or the 780 million sold in 1961-62. The value of sales of all feed grains against the 1963 pool amounted only to 114 million dollars, only a fraction of the \$845 million earned under the program in acreage diversion and price support payments.

CCC Sales of Feed Grains

Under The Livestock-Feed Program

Total 40 Million Bushels

Sales of feed grains by CCC under the emergency livestock-feed program are estimated at about 40 million bushels for the 1963-64 fiscal year. This included 26.1 million bushels of corn, 13.3 million bushels of sorghum grain, and less than 1 million bushels of oats and barley. These feed grains were sold to farmers in counties established as disaster areas because of drought, flood or other natural disaster. They were sold to livestock producers at reduced prices in order that they might maintain their basic livestock herds. Feeders were able to obtain this grain from CCC stocks at a price based on 75 percent of the county price support level for foundation herds and at the full support price for other eligible livestock. In 1963-64, the national average price support for corn was \$1.25 per bushel and for sorghum grain, \$2.00 per cwt.

There were 633 counties included in the disaster area under the livestock-feed program for at least part of the fiscal year. While the disaster areas were scattered over much of the country, most of the counties were in the South, the Southwest, or along the eastern seaboard. Over 85 percent of the total grain sold was sold in 8 States, estimated to be as follows: Texas, 8.9 million bushels; Virginia, 6.7 million; Oklahoma, 5.5 million; Missouri, 4.5 million; Pennsylvania, 3.0 million; Arkansas, 2.3 million; North Carolina, 2.0 million, and Louisiana, 1.8 million. In addition to the sale of grain at reduced prices in the designated disaster areas upon application and prior approval, farmers were permitted to graze or to harvest hay from land retired from production under the Conservation Reserve Program or land diverted to soil-conserving uses under the Wheat or Feed Grain Programs in 715 counties in calendar year 1963. In these cases, the program payments were reduced by the fair value of the feed obtained from harvesting the hay.

PRODUCTION OF LIVESTOCK AND POULTRY FORMULA FEEDS IN 1962

Production of commercially mixed livestock and poultry feeds was reported at 56.3 million tons in the 1962 calendar year by the Bureau of the Census in their second report on formula feed production by States.^{1/} The output of complete feeds was reported at 45.7 million tons, 7 percent more than in 1961. Feed supplement and concentrate production for all establishments was reported

^{1/} Poultry and Livestock Feed Production 1962, M20E (62)-1 July 1, 1964, Bureau of the Census, U. S. Department of Commerce.

Table 18.--Livestock and poultry feeds: Production of complete feeds, by kinds and by States, 1962

State	Total produc- tion 1/	Production for commercial sale		Production of complete feeds by large establishments 2/					
		Quantity	Value	Total	Poultry	Dairy	Beef cattle	Hog	Other livestock
	1,000 tons	1,000 tons	1,000 dol.	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Maine	107	3/	3/	3/	---	---	---	---	---
New Hampshire	124	124	9,291	3/	93	---	---	---	---
Vermont	767	758	58,203	693	378	294	3/	3/	18
Massachusetts	252	252	17,715	120	94	23	3/	3/	3/
Rhode Island	27	3/	3/	3/	---	---	---	---	---
Connecticut	180	180	13,179	3/	---	---	---	---	---
New York	2,858	2,602	183,083	3/	621	---	---	---	---
New Jersey	609	601	43,262	3/	277	---	---	---	---
Pennsylvania	1,922	1,013	78,688	444	294	3/	8	13	3/
North Atlantic	6,846	5,654	413,523	3,635	1,916	1,577	15	30	96
Ohio	2,089	1,153	87,232	786	464	230	3/	3/	36
Indiana	1,582	704	51,900	418	171	89	14	105	38
Illinois	959	594	47,248	412	159	73	23	118	38
Michigan	776	207	14,744	3/	2	2	2	3/	3/
Wisconsin	937	387	31,385	3/	---	11	5	3/	3/
East North Central	6,343	3,046	232,509	1,807	944	406	58	286	114
Minnesota	1,842	451	33,760	274	146	49	3/	37	3/
Iowa	2,085	1,000	74,969	500	168	32	63	202	35
Missouri	1,479	1,247	79,085	979	260	459	58	188	14
North Dakota	107	53	3,365	3/	---	---	---	---	---
South Dakota	321	210	14,762	32	18	3/	3/	12	3/
Nebraska	607	469	32,301	291	82	52	55	88	13
Kansas	794	535	34,227	137	59	3/	40	23	3/
West North Central	7,233	3,965	272,469	2,211	731	602	225	551	102
Delaware	455	428	34,951	3/	336	---	---	---	---
Maryland	753	564	44,907	318	279	20	8	6	5
Virginia	788	660	53,733	376	296	55	4	19	4
West Virginia	60	43	3,403	3/	---	---	---	---	---
North Carolina	1,796	1,669	130,287	1,043	886	84	8	46	19
South Carolina	294	229	18,061	3/	3/	35	3	6	3/
Georgia	1,545	1,467	111,906	1,230	1,128	54	8	32	8
Florida	510	482	34,628	297	115	138	23	8	13
South Atlantic	6,201	5,542	431,878	3,807	3,171	402	55	123	56
Kentucky	610	392	26,351	276	188	54	3/	21	3/
Tennessee	1,767	1,282	92,461	798	554	128	27	63	26
Alabama	1,475	1,275	95,304	1,024	807	114	34	37	32
Mississippi	902	809	53,678	295	194	53	3/	22	3/
Arkansas	887	874	63,387	622	537	24	16	7	37
Louisiana	455	365	23,335	278	186	45	24	5	18
Oklahoma	922	712	46,614	338	115	52	125	24	23
Texas	3,675	2,977	196,107	1,250	560	186	388	46	69
South Central	10,693	8,686	597,237	4,852	3,112	657	639	225	219
Montana	156	82	5,862	3/	---	---	---	---	---
Idaho	185	118	8,679	25	8	5	9	2	1
Wyoming	38	23	1,419	3/	---	---	---	---	---
Colorado	318	253	16,534	113	43	14	39	4	13
New Mexico	114	91	6,422	3/	---	---	---	---	---
Arizona	508	500	29,227	3/	---	---	---	---	---
Utah	403	256	18,496	134	83	17	3/	2	3/
Nevada	9	9	632	3/	---	---	---	---	---
Washington	862	732	55,246	451	285	140	11	5	9
Oregon	671	618	44,318	273	178	79	3/	4	5
California	5,032	4,994	320,599	2,228	1,661	470	59	12	26
Western	8,378	7,759	514,677	3,357	2,300	767	191	37	60
United States	45,695	34,652	2,462,293	19,668	12,175	4,412	1,183	1,253	646

1/ Production of complete formula feeds in commercial and local mills and by custom milling, but excludes production for feeding at same location. 2/ See footnote 1, table 19. Excludes custom millings. 3/ Data not reported to avoid disclosing of figures by individual companies.

Compiled from: Poultry and Livestock Feed Production, M20E(62)-1, Bureau of the Census, July 1, 1964.

Table 19.--Commercially prepared formula feeds: Production by large manufacturing establishments, by kinds, United States, 1961 and 1962 ^{1/}

Type of feed	Complete feeds ^{2/}		Supplements and concentrates		All feeds ^{3/}	
	1961	1962	1961	1962	1961	1962
	1,000	1,000	1,000	1,000	1,000	1,000
	tons	tons	tons	tons	tons	tons
<u>Poultry feeds</u>						
Layer and breeder	4,239	4,604	1,261	1,221	5,500	5,825
Starter and grower	1,412	1,466	158	215	1,570	1,681
Broiler feed	4,383	4,575	705	666	5,088	5,241
Turkey feed	1,494	1,278	329	343	1,823	1,621
Other poultry feeds	357	251	69	61	426	312
Total ^{3/}	11,884	12,175	2,522	2,506	14,406	14,681
<u>Livestock feeds</u>						
Dairy cattle	4,254	4,412	895	1,035	5,149	5,447
Beef cattle and sheep	1,130	1,183	1,289	1,693	2,419	2,876
Pig and hog	1,352	1,253	2,075	2,495	3,427	3,748
Other livestock feeds	570	646	81	67	651	713
Total ^{3/}	7,306	7,493	4,340	5,290	11,646	12,784
Total poultry and livestock feeds ^{3/}	19,190	19,668	6,862	7,796	26,052	27,465

^{1/} Large establishments are defined as those which reported the output of more than \$800,000 of complete feeds, supplements or concentrates in the 1958 Census of Manufacturers. ^{2/} Excludes custom milling. ^{3/} Data may not add to totals because of rounding. Total for all feeds involves some duplication to the extent large manufacturers purchased supplements and concentrates.

Compiled from: Poultry and Livestock Feed Production, M20E (62)-1, Bureau of Census, July 1, 1964.

Table 20.--Commercially prepared formula feeds: Production by large establishments by kinds and regions, 1961 and 1962 ^{1/}

Prepared formula feeds ^{2/}	North	East	West	South	South	Western	United
	Atlantic	North Central	North Central	Atlantic	Central		States ^{3/}
	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	tons	tons	tons	tons	tons	tons	tons
<u>1961</u>							
Dairy	1,635	729	903	394	733	756	5,149
Poultry	2,107	1,624	1,803	3,359	3,449	2,063	14,406
Beef cattle and sheep	39	427	1,075	66	584	228	2,419
Hog	51	1,262	1,492	206	352	64	3,427
All other	81	92	142	51	204	76	651
Total ^{3/}	3,913	4,134	5,415	4,076	5,322	3,187	26,052
<u>1962</u>							
Dairy	1,766	771	915	469	741	784	5,447
Poultry	2,056	1,524	1,379	3,544	3,761	2,417	14,681
Beef cattle and sheep	34	452	1,158	88	855	287	2,876
Hog	4/	1,298	1,667	250	419	4/	3,748
All other	96	141	121	61	225	66	713
Total ^{3/}	4,012	4,186	5,240	4,412	6,001	3,615	27,465

^{1/} See footnote 1, table 19. ^{2/} Complete feeds, concentrates and supplements, excluding production by custom milling. ^{3/} Data may not add to totals because of rounding or withholding figures of individual companies. ^{4/} Not reported separately to avoid disclosing of figures of individual companies.

Compiled from: Poultry and Livestock Feed Production, M20E (62)-1, Bureau of Census, July 1, 1964.

at 10.6 million tons. Of this total, 7.8 million was produced in large establishments (see below), 14 percent more than in 1961. Production, in this report, includes feeds produced by custom mixing as well as production for sale.

The survey also included the production of feed by livestock feedlot operators or others mixing feed for their own use, which totaled 4.9 million tons. However, this coverage was considered incomplete and was not included in the total production of formula feeds as given above.

The 1962 production of formula feeds by large manufacturing establishments totaled 27.8 million tons, 5 percent larger than in 1961. The large manufacturing plants were those reporting an output of \$800,000 or more of complete feeds, supplements and concentrates in the 1958 census. The other manufacturing establishments, including smaller producers as well as processors not engaged exclusively in feed production, reported 28.4 million tons.

Much of the increase in production of complete feeds in 1962 over 1961 was in feeds not produced for commercial sale. In 1962, 34.7 million tons of formula feeds were produced for sale, about the same as in 1961. The quantity of feed processed by custom milling, increased nearly a fifth to 11.0 million tons. The value of feed sold was reported at \$2,462 million, an average price of \$71.10 per ton, \$2.50 less than in 1961.

Production of the large manufacturers was again broken down between complete feeds and supplements and concentrates (table 19). Although poultry production continues to be the major outlet for formula feeds, hog and beef cattle feeders have expanded their use of formula feeds rapidly in recent years. The 1962 production of all kinds of poultry feeds was 14.7 million tons, 2 percent more than in 1961. This compares with a 5 percent increase in the production of all formula feeds. Poultry feeds declined from 55 percent of the total output in 1961 to 53 percent in 1962. The output of beef cattle and sheep feeds increased 19 percent and pig and hog feeds 9 percent from 1961 to 1962. Together, these feeds made up about 25 percent of formula feed production in 1962.

Production of feed supplements and concentrates has increased much more rapidly in recent years than the output of complete feeds. The 7.8 million tons produced in large establishments in 1962 was 14 percent above a year earlier and amounted to more than a fourth of the total formula feed output of large establishments. Beef cattle and hog feeders are major users of these feeds and in 1962, 54 percent of the total output was used for these types of livestock. Supplements and concentrates accounted for 59 percent of the beef cattle feed produced in 1962 and 67 percent of the hog feeds produced. On the other hand, the supplements and concentrates made up less than 20 percent of the poultry and dairy feeds produced.

The production of formula feed by custom milling in 1962 totaled about 11.0 million tons. In the 1962 survey, custom milling included only feeds made from the customers ingredients. They did not include ingredients furnished by the processor, which were included with commercial sales. For this reason the custom milling data for 1962 are not strictly comparable with the 1961 data.

Livestock producers in the Eastern, Southern, and Western States use a larger percentage of their feed as commercially prepared formula feeds than do those in the Midwestern States. The Midwestern States grow most of the feed consumed by livestock in the region and supplement this feed with commercially prepared concentrates and supplements. The 4,186,000 tons of formula feeds processed in 1962 by large establishments in the East North Central Region amounted to only 213 pounds per grain-consuming animal unit fed in the region in 1961-62. The 5,240,000 tons produced in the West North Central Region amounted to only 175 pounds per animal unit. In the North Atlantic Region the production of formula feeds by large establishments amounted to 664 pounds per animal unit; in the South Atlantic Region, 459 pounds; in the South Central Region, 483 pounds; and in the Western Region, 533 pounds. The differences in the actual consumption per animal unit in the Midwest and the other regions may be even greater than indicated by these figures, since the Midwest is generally a surplus producer of feeds--substantial quantities of feed, including some mixed feeds, are shipped from the Midwest to other areas.

UREA EXPANDS AS A SOURCE OF PROTEIN FEED IN RECENT YEARS

by Jack S. Ross*

The use of urea as a source of protein in livestock rations has expanded rapidly in recent years. Its principal advantage is that it provides a low cost source of protein for cattle and sheep. In calendar year 1963, 142,000 tons of urea (42 percent nitrogen basis) was sold for use in livestock feed, a little more than double the quantity 7 years ago. On a protein basis, this would be equivalent to about 760,000 tons of 44 percent oilseed meal. During the 1962-63 feeding year, urea accounted for about 5 percent of all natural high-protein feed consumed by livestock and poultry and about 14 percent of the protein used in cattle and sheep feeds.

Urea, an organic nitrogenous compound, was first synthesized by a German chemist more than 130 years ago. In recent years, about 12 percent of U.S. urea production has been destined for livestock feed, 80 percent for fertilizer use and 8 percent for the production of plastics and other industrial products. Fertilizer urea is manufactured with a nitrogen content of about 46 percent. Feed-grade urea contains about 42 percent nitrogen because of further processing to improve mixing qualities and prevent caking. This is done by micro-prilling and coating the crystals with a conditioner such as dolomitic limestone, bran, or inert clay. Only 8 U.S. firms manufactured feed urea in 1962.

Urea Feeding Practices

Feeding of urea is limited to only those classes of animals which have ruminant digestive tracts--cattle, sheep and goats. Supported by adequate quantities of cereal or carbohydrate-base concentrates and roughages, the nitrogen from urea is converted to usable proteins through bacterial activity in the rumen. Because urea alone contains no feed energy, carbohydrates are required to supply energy as the urea is broken down to release ammonia. The ammonia is either used by the bacteria or absorbed into the animal's blood stream. Cereal grains or molasses are generally used as sources of carbohydrates. For example, in substituting urea for an oilmeal, 7 or 8 pounds of the meal is replaced by approximately 1 pound of urea plus 6 or 7 pounds of corn. Most animal nutritionists recommend that no more than a third of the total protein of the ration should be replaced by urea. Many States, through feed laws and inspection services, enforce this maximum rate of substitution in complete feed rations. However, some feed mixing firms prepare beef and dairy cattle protein concentrates which contain enough urea to provide more than a third of the total protein. Buyers of this form of protein concentrate should closely adhere to the manufacturer's directions for usage given on a conspicuous label.

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Table 21.--Urea: Distribution of domestic production and sales, United States, 1956-63 1/

Calendar year	Total, all urea		Feed		Fertilizer, solid and liquid		Other <u>2/</u>	
	Production	Sales	Production	Sales	Production	Sales	Production	Sales
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
1956	420.9	373.6	<u>3/</u> 63.0	<u>3/</u> 60.0	247.2	215.9	<u>3/</u> 110.7	<u>3/</u> 97.7
1957	480.2	448.2	68.2	65.1	292.1	276.0	119.9	107.1
1958	530.6	495.0	74.8	<u>3/</u> 73.8	364.5	345.8	91.3	<u>3/</u> 75.5
1959	630.6	576.5	<u>3/</u> 85.0	80.9	444.1	413.7	<u>3/</u> 101.6	81.9
1960	734.5	706.5	95.0	94.6	548.4	547.6	91.1	64.3
1961	921.8	889.0	101.5	107.4	734.5	707.7	85.8	73.9
1962	1,010.0	967.0	111.4	114.1	807.7	789.3	90.9	63.6
1963 <u>4/</u>	1,075.0	1,025.0	125.0	130.0	850.0	825.0	100.0	70.0

1/ For comparability, all data are shown on basis of 46 percent nitrogen content. Feed urea normally contains 42 percent nitrogen. 2/ Plastics and other industrial uses. 3/ Estimated; data not reported separately. 4/ Partly estimated; final data not available at time of printing.

Compiled from reports of the U.S. Tariff Commission.

Table 22.--High protein feeds fed to cattle and sheep and sales of feed grade urea, October-September, 1955-62

Year beginning October	High-protein feed in terms of <u>44</u> percent protein soybean meal						
	Oilmeals, animal proteins and grain proteins fed to livestock and poultry				Sales of feed-grade urea <u>1/</u>		
	Total all livestock and poultry	Beef cattle	Dairy cattle	Sheep	Total cattle and sheep	From domestic production <u>2/</u>	As a percentage of protein fed to cattle and sheep
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Percent
1955-56	12,601	1,832	1,690	189	3,711	350	9.4
1956-57	13,212	1,789	1,784	189	3,762	382	10.2
1957-58	13,813	1,789	2,034	192	4,015	433	10.8
1958-59	15,102	2,033	2,085	185	4,303	475	11.0
1959-60	14,730	2,277	2,108	200	4,585	555	12.1
1960-61	15,486	2,171	2,476	222	4,869	630	12.9
1961-62	16,168	2,698	2,282	210	5,190	670	12.9
1962-63	16,585	2,803	2,560	242	5,605	<u>3/</u> 760	13.6

1/ Sales of 46 percent nitrogen feed-grade urea from table 21 converted to 42 percent nitrogen basis. Assuming urea is a 262 percent protein feed and 90 percent is directly substituted, a factor of 5.36 is used for converting urea to 44 percent protein soybean meal equivalent. 2/ Year beginning following January. 3/ Partly estimated.

Urea data derived from reports of the U.S. Tariff Commission.

Distribution of Urea Sales

In calendar 1963, sales of all urea (46 percent nitrogen basis) from domestic production was estimated at 1,025,000 tons, or nearly 3 times those in 1956 (table 21). Of this total, 80 percent was for fertilizer, 13 percent for feed, and 7 percent for industrial use. The largest and fastest expanding urea market is fertilizer. Sales of fertilizer urea in 1963 (solid and liquid combined) was about 825,000 tons, nearly 4 times those 7 years earlier.

Sales of feed-grade urea also have trended upward since output reached a commercial scale in the early 1950's. In 1963, sales of 46 percent nitrogen urea totaled 130,000 tons, 14 percent above 1962 and a little more than double the sales in 1956. The 1963 total would be equivalent to 142,000 tons of feed grade urea on a 42 percent nitrogen basis. Feed urea sales since 1959 have exceeded the sales for other industrial uses, which have been fairly stable, averaging about 80,000 tons annually since 1956.

Consumption of Urea and High-Protein Feeds

The 142,000 tons of urea sold in 1963, (42 percent nitrogen basis) would be equivalent to approximately 760,000 tons of 44 percent protein soybean meal. A pound of feed urea at 42 percent nitrogen is potentially equivalent to 2.62 pounds of protein or urea can be expressed on the basis of protein as a 262 percent protein feed ingredient. Assuming 90 percent is directly substituted, this is equal to about 5.36 pounds of oilseed meal or other protein feed carrying a protein content of 44 percent.

The quantity of protein feed fed to all cattle and sheep has trended upward sharply in recent years. The 5.6 million tons fed in October 1962-September 1963 was 8 percent more than the year before and about 50 percent more than 7 years earlier (table 22). Sales of feed-grade urea have increased at a faster rate than other high-protein feeds consumed by cattle and sheep. In 1963, feed urea--in terms of 44 percent protein equivalent--was more than 13 percent of the oilmeal and grain proteins consumed by cattle and sheep, compared with 9 percent in 1956. The expansion in beef cattle feedlot operations and increased dairy cow feeding rates have contributed to more protein feeding. The increase in sales of feed urea also have been influenced by the rise in recent years in sales of commercially prepared beef and dairy cattle feeds.

Advantages in Feeding Urea

The chief advantage of urea appears to be in preparing low-cost rations during periods when prices of natural proteins are high in relation to prices of cattle, sheep, and dairy products. Under such conditions, significant savings may be derived by the use of a urea-grain mixture to replace portions of a more costly natural high-protein feed ingredient. However, a lower cost urea ration does not necessarily justify its use instead of a ration containing all natural proteins. A reduction in the cost per unit of production of live-stock and livestock products must also be attained. Results of urea feed trials in the early 1950's revealed in many cases that the rates of gain with urea tended to fall below those with rations containing all natural proteins. More extensive feed tests in recent years have revealed some promising results in

Table 23.--Urea, feed grade: Wholesale price, bagged, 42 percent nitrogen, at specified markets, by months 1960-63

Year beginning October	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Av.
	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per ton
Points east of the Rockies 1/													
1960-61	---	---	---	---	---	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1961-62	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
1962-63	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	100.00	100.00	100.00	100.00	96.00
1963-64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Woodstock, Tennessee 2/													
1960-61	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	95.00	103.00	103.00	105.00	100.00
1961-62	105.00	105.00	105.00	105.00	105.00	105.00	105.00	---	95.00	95.00	95.00	95.00	101.00
1962-63	95.00	95.00	95.00	95.00	---	95.00	95.00	---	95.00	95.00	95.00	95.00	95.00
1963-64	95.00	100.00	100.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
Pryor, Oklahoma 3/													
1960-61	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	95.00	95.00	95.00	95.00	98.00
1961-62	95.00	95.00	95.00	95.00	95.00	95.00	95.00	---	95.00	95.00	95.00	95.00	95.00
1962-63	95.00	95.00	95.00	---	---	95.00	95.00	---	95.00	95.00	95.00	95.00	95.00
1963-64	95.00	100.00	95.00	100.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
Laplatte, Nebraska and South Point, Ohio 4/													
1960-61	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	95.00	95.00	95.00	95.00	98.00
1961-62	95.00	95.00	96.00	96.00	96.00	96.00	96.00	---	95.00	95.00	95.00	95.00	95.00
1962-63	95.00	95.00	95.00	---	---	95.00	95.00	---	100.00	100.00	100.00	100.00	97.00
1963-64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

1/ In carlots delivered east of the Rockies. 2/ F.o.b. seller's plant at Woodstock or Memphis in 5-ton minimum quantity. 3/ f.o.b. Pryor. 4/ Freight allowed.

Compiled from issues of the Oil, Paint and Drug Reporter and Feedstuffs.

Table 24.--Comparative cost of grain-urea mixtures with soybean meal
and cottonseed meal, October-September, 1951-63

Year beginning October	Corn, No. 3 Yellow, Chicago	Corn-urea mixture 1/	Soybean meal, 44 percent protein, Chicago	Differ- ence	Sorghum, grain No. 2, Yellow Ft. Worth	Sorghum grain-urea mixture 1/	Cottonseed meal, 41 percent protein, Ft. Worth	Differ- ence
	Dol. per bu.	Dol. per ton	Dol. per ton	Dol. per ton	Dol. per cwt.	Dol. per ton	Dol. per ton	Dol. per ton
1951	1.826	72.70	89.95	17.25	3.16	71.00	89.55	18.55
1952	1.589	65.50	74.70	9.20	3.07	69.50	73.90	4.40
1953	1.534	63.80	85.30	21.50	2.78	64.50	65.10	.60
1954	1.475	62.00	67.00	5.00	2.51	59.90	66.20	6.30
1955	1.239	54.80	59.00	4.20	2.29	56.10	59.00	2.90
1956	1.312	57.00	54.35	- 2.65	2.29	56.10	57.30	1.20
1957	1.211	53.90	60.40	6.50	2.20	54.60	54.80	.20
1958	1.207	53.80	60.50	6.70	2.23	55.10	63.55	8.45
1959	1.171	52.70	59.20	6.50	1.98	50.80	62.15	11.35
1960	1.096	50.40	64.30	13.90	2.04	51.80	60.10	8.30
1961	1.109	50.80	67.50	16.70	2.06	52.20	65.30	13.10
1962	1.189	53.20	75.20	22.00	2.13	53.40	72.00	18.60
1963								
October	1.181	53.00	77.60	24.60	2.25	55.40	75.70	20.30
November	1.154	52.20	79.20	27.00	2.24	55.20	77.50	22.30
December	1.191	53.30	81.70	28.40	2.25	55.40	77.10	21.70
January	1.215	54.00	81.50	27.50	2.30	56.30	77.10	20.80
February	1.194	53.40	78.75	25.35	2.31	56.40	73.00	16.60
March	1.212	54.90	77.60	22.70	2.27	55.80	69.20	13.40
April	1.236	55.70	74.00	18.30	2.29	56.10	64.20	8.10
May	1.278	56.00	69.80	13.80	2.29	56.10	57.20	1.10
June	1.258	55.30	70.70	15.40	2.29	56.10	58.00	1.90
July	1.218	54.10	69.80	15.70	2.29	56.10	60.10	4.00

1/ Based on mixture of 1,715 pounds of grain and 285 pounds of urea at 5 cents per pound. Includes grain grinding allowance of 15 cents per cwt.

maintaining gains and carcass grades. Despite certain limitations in feeding practices, urea has become a generally accepted feed ingredient for many cattle and sheep rations.

Wholesale prices of urea have been very stable during the past 4 years--averaging \$95.00-\$100.00 per ton delivered for bagged 42 percent feed-grade in plants located east of the Rockies. In October 1963 through July 1964, wholesale prices of bagged urea at Woodstock, Tennessee, and Pryor, Oklahoma averaged about \$95.00 per ton (table 23). At markets in Nebraska and Ohio, they averaged \$100.00 per ton.

Cost of Grain-Urea Mixtures
Compared with Oilmeals

The prices of grain-urea mixtures and oilmeals during the past 12 years which show the general relationship between prices of grain-urea mixtures and oilmeals are presented in table 24. These relationships are not considered exact measures of differences in costs between grain-urea mixtures and oilmeals because feed ingredient prices vary seasonally and by areas. The quantity of urea used to replace natural protein also varies according to the kind of ration being formulated. Other types of carbohydrates could be used with urea which would change the values derived in determining relative cost rations containing urea. However, the differences do indicate year-to-year changes in the relative cost of grain-urea mixtures compared with soybean meal and cottonseed meal.

In 1951-52, prices of soybean meal or cottonseed meal were high in relation to the price of corn-urea mixture. Soybean meal at Chicago averaged \$17.25 per ton above a corn-urea mixture. During the ensuing 4 years this difference in the corn-urea ration generally declined to \$4.20 per ton in 1955-56. This period was characterized by falling prices in both corn and soybean meal, with meal prices declining at a somewhat greater rate than corn. In the middle and late 1950's, the difference ranged from a minus \$2.65 per ton to less than \$8.00 in substituting corn-urea for meal. During the past 3 years, soybean meal prices have increased more than corn and urea prices, resulting in a widening difference between costs of corn-urea mixtures and meal. In 1960-61, the difference between corn-urea and soybean meal was \$13.90 per ton, rising to \$22.00 in 1962-63. During October-December 1963, this difference averaged \$26.70 per ton. Because of rising corn prices and declining soybean meal prices since January, the difference declined to an average of about \$15.00 per ton in May-July. Annual sales of urea have increased consistently in the past 7 years. The sales apparently have not been materially influenced by grain-urea and oilmeal price relationships. These comparisons indicate that factors other than prices also have influenced urea feeding during this period.

Cost comparisons of sorghum grain-urea mixtures and cottonseed meal showed patterns of change similar to those of corn and soybean meal. Cottonseed meal is used predominantly in dairy and beef cattle feeding operations throughout the Southern and Western States. During most of the period covered, there appeared to be less incentive for feed manufacturers in Southern and Western States to use urea in place of cottonseed meal than for manufacturers in the Midwestern States to substitute urea for soybean meal.

Table 25.--Feed grains: Domestic disappearance and exports, by quarters, United States, average 1958-62, annual 1958-63

Year beginning October	October-December		January-March		April-June		July-September		October-September	
	Domestic	Exports	Domestic	Exports	Domestic	Exports	Domestic	Exports	Domestic	Exports
	disap- pearance	1/ bu.	disap- pearance	1/ bu.	disap- pearance	1/ bu.	disap- pearance	1/ bu.	disap- pearance	1/ bu.
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Corn										
Average 1958-62	953	81	970	77	764	89	694	74	3,381	321
1958	898	60	862	50	707	62	605	58	3,072	230
1959	939	66	958	51	755	58	681	55	3,333	230
1960	931	77	951	72	775	74	739	69	3,396	292
1961	1,045	95	987	123	788	123	740	94	3,560	435
1962 2/	952	107	1,095	85	793	130	705	94	3,545	416
1963 2/	894	151	970	120	809	110				
Oats										
Average 1958-62	221	7	299	5	229	7	343	11	1,092	30
1958	275	7	369	10	287	9	405	18	1,336	44
1959	220	11	276	7	207	9	329	12	1,032	39
1960	225	7	288	6	229	5	357	6	1,099	24
1961	195	3	280	1	207	11	317	12	999	27
1962 2/	193	6	280	3	213	3	307	4	993	16
1963 2/	173	1	257	3/	202	1				
Barley										
Average 1958-62	88	24	93	21	69	24	108	20	358	69
1958	84	30	81	25	76	23	118	41	359	119
1959	80	29	93	26	58	22	107	22	338	99
1960	98	24	93	19	78	21	108	10	377	74
1961	94	15	98	24	60	36	92	17	344	92
1962 2/	86	23	100	12	73	16	111	11	370	62
1963 2/	84	18	85	15	76	25				
Sorghum grain										
Average 1958-62	142	24	133	25	83	23	4/35	25	384	97
1958	154	24	76	28	62	18	5/	30	5/281	100
1959	169	26	103	23	87	21	25	30	384	100
1960	145	24	160	13	86	20	38	14	429	71
1961	125	18	160	27	79	26	58	28	422	99
1962 2/	118	29	166	31	101	32	18	21	403	113
1963 2/	185	32	160	27	106	19				
Total (Million tons) 4 grains										
Average 1958-62	36.3	3.6	37.9	3.4	29.0	3.8	28.3	3.4	131.5	14.2
1958	35.9	3.2	34.1	2.9	27.9	2.9	26.3	3.7	124.2	12.7
1959	36.5	3.4	36.4	2.8	28.3	2.9	27.6	3.1	128.8	12.2
1960	36.1	3.5	37.9	2.9	29.6	3.2	30.1	2.7	133.7	12.3
1961	38.1	3.6	38.9	4.8	29.1	5.2	29.6	4.0	135.7	17.6
1962 2/	35.1	4.5	42.2	3.6	30.2	5.0	27.8	3.5	135.3	16.6
1963 2/	35.0	5.5	37.8	4.5	30.7	4.2				

1/ Corn, cornmeal, grits and wet process products, oats and oat meal, barley and malt, and sorghum grain. 2/ Preliminary. 3/ Less than 500 thousand bushels. 4/ Four-year average. 5/ Quarterly figures for October-June domestic disappearance add to 292 million bushels, leaving a balancing item of -11 million for July-September. Some of the sorghum grain fed and exported in this quarter would come from the 1959 crop.

Table 26.--Feed grains: Planted and harvested acreages, United States,
average 1958-62, annual 1958-64

Year	Corn		Oats		Barley		Sorghums	
	Planted	Harvested	Planted	Harvested	Planted	Harvested	Planted	Harvested
	all	for	Planted	Harvested	Planted	Harvested	all	for
	purposes	grain					purposes	grain
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	acres	acres	acres	acres	acres	acres	acres	acres
Average								
1958-62	74,085	64,469	33,347	26,471	15,798	13,805	17,820	14,002
1958	73,351	63,549	37,699	31,247	16,150	14,791	20,675	16,524
1959	82,742	72,091	35,108	27,793	16,817	14,918	19,502	15,402
1960	81,711	71,649	31,538	26,646	15,614	13,939	19,588	15,592
1961	66,771	58,449	32,514	23,994	15,773	12,946	14,292	10,957
1962	65,850	56,609	29,874	22,675	14,636	12,430	15,042	11,536
1963 1/	70,053	60,654	28,869	21,757	13,840	11,538	17,771	13,488
1964 2/	67,363	58,399	25,831	20,694	12,363	10,722	17,021	3/12,200

1/ Preliminary. 2/ Based on July 1 indications. 3/ Based on August 1 indications.

Table 27.--Feed grains: Production, United States,
average 1958-62, annual 1958-64

Year	Corn	Oats	Barley	Sorghum	Total
	for grain			grain	
	1,000	1,000	1,000	1,000	1,000
	bushels	bushels	bushels	bushels	tons
Average					
1958-62	3,670,215	1,128,110	432,635	549,104	146,574
1958	3,356,205	1,401,410	477,368	581,012	144,122
1959	3,824,598	1,052,059	422,383	555,211	149,605
1960	3,908,070	1,155,312	431,309	619,867	155,618
1961	3,625,530	1,011,398	395,669	479,751	140,626
1962	3,636,673	1,020,371	436,448	509,685	142,899
1963 1/	4,081,791	980,910	399,921	583,466	155,920
1964 2/	3,885,397	909,594	387,669	473,002	145,893

1/ Preliminary. 2/ Based on August 1 indications.

Table 28.--Feed grains: Acreage, yield and production, United States,
average 1958-62, annual 1958-64

Year	Yield per harvested acre				Four feed grains			
	Corn	Oats	Barley	Sorghum	Planted	Acreage	Yield per	Total
				grain	acres	harvested	harvested	production
					for grain	acre		
	Bushels	Dushels	Bushels	Bushels	Million	Million	Ton	Million
	acres	acres	acres	acres	acres	acres	acres	tons
Average								
1958-62	57.3	42.7	31.4	39.8	141.1	118.7	1.24	146.6
1958	52.8	44.8	32.3	35.2	147.9	126.1	1.14	144.1
1959	53.1	37.9	28.3	36.0	154.2	130.2	1.15	149.6
1960	54.5	43.4	30.9	39.8	148.5	127.8	1.22	155.6
1961	62.0	42.2	30.6	43.8	129.4	106.3	1.32	140.6
1962	64.2	45.0	35.1	44.2	125.4	103.2	1.38	142.9
1963 1/	67.3	45.1	34.7	43.3	130.5	107.4	1.45	155.9
1964 2/	66.5	44.0	36.2	38.7	123.6	102.0	1.43	145.9

1/ Preliminary. 2/ Based on August 1 indications.

Table 29.--Corn: Acreage planted by regions, average 1958-62, annual 1958-64

Year	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>
Average 1958-62	2,100	21,926	34,034	6,884	7,972	1,169	74,085
1958	2,163	21,107	32,204	7,330	9,230	1,317	73,351
1959	2,165	23,917	38,553	7,623	9,166	1,318	82,742
1960	2,138	24,371	38,272	7,294	8,439	1,197	81,711
1961	1,987	19,881	30,863	6,324	6,700	1,016	66,771
1962	2,047	20,354	30,280	5,848	6,325	996	65,850
1963 <u>1/</u>	2,157	21,673	32,947	6,279	6,053	944	70,053
1964 <u>2/</u>	2,165	21,881	30,610	6,137	5,630	940	67,363

1/ Preliminary.2/ Based on July 1 indications.

Table 30.--Sorghum: Acreage planted in leading States, average 1958-62, annual 1958-64

Year	Texas	Oklahoma	Kansas	Nebraska	Missouri	California	Other States	United States
	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>	1,000 <u>acres</u>
Average 1958-62	7,247	1,177	4,669	1,750	537	257	2,183	17,820
1958	8,463	1,307	4,981	1,848	847	282	2,947	20,675
1959	8,209	1,320	5,180	1,626	635	290	2,242	19,502
1960	7,716	1,280	5,491	2,032	590	261	2,218	19,588
1961	5,864	934	3,734	1,422	336	222	1,780	14,292
1962	5,981	1,046	3,958	1,820	276	233	1,728	15,042
1963 <u>1/</u>	6,818	1,234	4,948	2,184	304	256	2,027	17,771
1964 <u>2/</u>	6,545	1,185	4,107	2,402	319	289	2,174	17,021

1/ Preliminary.2/ Based on July 1 indications.

Table 31.--Sorghum grain: Production in leading States, average 1958-62, annual 1958-64

Year	Texas	Oklahoma	Kansas	Nebraska	New Mexico	California	Other States	United States
	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>	1,000 <u>bushels</u>
Average 1958-62	239,690	19,633	135,405	78,038	8,881	14,909	52,549	549,105
1958	251,427	19,175	131,240	76,328	7,718	14,820	80,304	581,012
1959	257,832	18,625	137,802	61,683	7,980	16,510	54,779	555,211
1960	258,552	23,760	167,544	90,698	9,243	15,611	54,459	619,867
1961	229,635	16,866	111,680	59,842	9,310	13,800	38,618	479,751
1962	201,006	19,740	128,760	101,640	10,152	13,802	34,585	509,685
1963 <u>1/</u>	245,310	21,830	144,300	102,406	13,630	15,750	40,240	583,466
1964 <u>2/</u>	210,120	11,840	86,580	97,608	9,000	17,780	40,074	473,002

1/ Preliminary.2/ Based on August 1 indications.

Table 32.--Corn, oats, and barley: Production by regions,
average 1958-62, annual 1956-64

Year	North Atlantic	East North Central	West North Central	South Atlantic	South Central	Western	United States
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
Corn for grain							
Average 1958-62	75,193	1,371,399	1,704,248	231,324	255,011	33,040	3,670,215
1956	77,231	1,262,611	1,201,564	227,497	279,170	27,263	3,075,336
1957	53,348	1,097,062	1,433,678	174,348	248,779	38,140	3,045,355
1958	81,414	1,184,659	1,527,399	239,923	284,952	37,858	3,356,205
1959	78,050	1,426,829	1,767,636	227,940	284,956	39,187	3,824,598
1960	78,024	1,458,742	1,839,071	248,906	250,562	32,765	3,908,070
1961	77,456	1,346,702	1,700,392	224,518	245,246	31,216	3,625,530
1962	61,023	1,440,064	1,686,741	215,335	209,337	24,173	3,636,673
1963 <u>1/</u>	59,705	1,588,278	1,930,747	234,127	241,951	26,983	4,081,791
1964 <u>2/</u>	76,962	1,633,829	1,673,058	252,966	223,119	25,733	3,885,397
Oats							
Average 1958-62	64,278	356,130	564,969	33,902	63,091	45,740	1,128,110
1956	58,582	407,334	494,792	60,737	80,356	49,597	1,151,398
1957	70,261	361,437	672,572	46,185	79,438	59,987	1,289,880
1958	67,012	446,120	706,976	37,588	89,127	54,587	1,401,410
1959	69,440	337,809	499,436	40,665	60,130	44,579	1,052,059
1960	62,710	347,508	613,453	29,382	60,236	42,023	1,155,312
1961	64,079	323,968	484,356	34,622	65,721	38,652	1,011,398
1962	58,148	325,247	520,622	27,254	40,239	48,861	1,020,371
1963 <u>1/</u>	65,829	316,391	506,262	21,049	28,887	42,492	980,910
1964 <u>2/</u>	60,361	262,562	471,947	25,206	47,697	42,001	909,594
Barley							
Average 1958-62	9,234	10,453	154,696	12,481	26,867	218,905	432,635
1956	11,930	16,543	135,072	12,807	13,163	187,146	376,661
1957	11,195	13,481	141,065	10,970	18,827	247,223	442,761
1958	12,416	13,699	190,881	11,254	30,789	218,329	477,368
1959	6,158	9,918	146,268	12,083	24,108	223,848	422,383
1960	9,116	9,733	160,415	12,804	29,448	209,793	431,309
1961	9,773	10,697	122,603	14,481	33,802	204,313	395,669
1962	8,707	8,216	153,314	11,782	16,187	238,242	436,448
1963 <u>1/</u>	7,842	6,722	144,586	10,240	13,667	216,864	399,921
1964 <u>2/</u>	8,128	4,788	127,129	14,072	17,474	216,078	387,669

1/ Preliminary.2/ August 1 indications.

Table 33.--Feed grains: Total stocks and stocks owned by CCC, quarterly, 1960 to date

Year	Total stocks <u>1/</u>				Owned by CCC <u>2/</u>			
	January 1	April 1	July 1	October 1	January 1	April 1	July 1	October 1
	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>
Corn								
1960	4,343,541	3,335,348	2,522,071	1,786,966	1,225,183	1,196,916	1,151,917	1,285,881
1961	4,687,297	3,664,924	2,816,056	2,008,357	1,447,907	1,405,912	1,199,958	1,326,833
1962	4,494,569	3,385,027	2,473,315	1,639,546	1,216,188	997,075	675,294	888,313
1963	4,216,669	3,037,357	2,114,517	1,315,593	958,475	788,222	504,648	810,260
1964 <u>3/</u>	4,352,944	3,263,761	2,345,072		794,485	778,306	749,124	
Oats								
1960	766,127	483,338	267,311	1,082,550	11,730	12,194	14,514	11,252
1961	851,576	558,056	324,636	972,603	11,082	9,878	9,025	8,461
1962	774,652	494,740	276,576	968,228	6,761	6,518	14,292	15,705
1963	770,475	488,392	274,422	945,928	15,261	14,090	17,087	18,942
1964 <u>3/</u>	773,277	517,493	315,451		18,987	18,570	28,254	
Barley								
1960	360,975	245,163	167,389	472,962	62,568	57,533	68,709	61,245
1961	358,256	246,879	152,762	435,976	52,153	47,391	50,926	41,611
1962	335,536	216,984	123,711	452,665	32,074	26,113	29,343	28,647
1963	345,754	233,772	146,836	425,987	28,173	27,803	38,434	46,817
1964 <u>3/</u>	329,503	230,967	132,738		27,681	29,365	28,684	
Sorghum grain								
1960	869,642	743,999	636,156	581,219	480,019	475,337	571,692	548,588
1961	1,032,369	859,783	753,967	701,928	551,744	541,068	688,980	665,741
1962	1,038,187	851,168	745,836	660,908	600,082	533,288	688,304	627,581
1963	1,023,376	826,604	694,037	654,524	548,213	461,625	661,233	626,730
1964 <u>3/</u>	1,021,464	839,543	714,525		573,985	542,994	642,153	

1/ Stocks in all positions, including stocks on farms, at terminal markets, elevators and warehouses and Government-owned. 2/ Compiled from reports of the Agricultural Stabilization and Conservation Service. 3/ Preliminary.

Table 34.--Feed grains: Distribution of July 1 stocks, United States, 1962-64

Year	Farm	Commodity Credit Corporation <u>1/</u>	Terminal market, mill, elevator and warehouse	Total
	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>	<u>1,000 bu.</u>
Corn				
1962	1,549,423	419,902	503,990	2,473,315
1963	1,385,912	384,000	344,605	2,114,517
1964 <u>2/</u>	1,479,390	397,390	468,292	2,345,072
Oats				
1962	228,698	1,654	46,224	276,576
1963	231,887	2,723	39,812	274,422
1964 <u>2/</u>	252,267	4,591	58,593	315,451
Barley				
1962	47,951	7,323	68,437	123,711
1963	67,571	9,492	69,773	146,836
1964 <u>2/</u>	59,667	13,140	59,931	132,738
Sorghum grain				
1962	41,473	4,841	699,522	745,836
1963	50,270	4,284	639,483	694,037
1964 <u>2/</u>	62,625	4,580	647,320	714,525

1/ In bins or other storage owned or controlled by CCC; other CCC-owned grain is included in stocks at other positions. 2/ Preliminary.

Table 35.--Wheat and Feed Grains: Prices received by farmers in selected States, July, 1963 and 1964

State	Feed grain 1/	1963			1964		
		Wheat	Feed grain	Difference	Wheat	Feed grain	Difference
		Dol. per 100 lbs.	Dol. per 100 lbs.	Dol. per 100 lbs.	Dol. per 100 lbs.	Dol. per 100 lbs.	Dol. per 100 lbs.
Pennsylvania	Corn	2.85	2.52	.33	2.20	2.50	-.30
Maryland	Corn	2.75	2.59	.16	2.07	2.48	-.41
North Carolina	Corn	3.07	2.43	.64	2.25	2.36	-.11
Arkansas	Corn	2.94	2.32	.62	2.15	2.25	-.10
Ohio	Corn	2.73	2.16	.57	2.17	2.09	.08
Illinois	Corn	2.97	2.16	.81	2.27	2.04	.23
Minnesota	Corn	3.39	2.02	1.37	2.48	1.91	.57
Missouri	Corn	2.97	2.21	.76	2.27	2.13	.14
Nebraska	Corn	2.92	2.05	.87	2.13	2.02	.11
Kansas	Sorghum grain	2.95	1.76	1.19	2.18	1.75	.43
Texas	Sorghum grain	3.15	1.77	1.38	2.40	1.79	.61
Colorado	Corn	2.92	2.32	.60	2.12	2.21	-.09
Montana	Barley	3.00	1.44	1.56	2.12	1.56	.56
Idaho	Barley	2.90	1.90	1.00	2.13	2.00	.13
Oregon	Barley	2.98	1.90	1.08	2.35	2.02	.33
Washington	Barley	2.95	1.73	1.22	2.27	1.85	.42

1/ Price comparisons are for wheat and the feed grains listed, both converted to dollars per 100 pounds. No adjustment has been made for difference in feeding value. Relative feeding value of these grains were reported as follows: Corn 1.00; wheat 1.05; barley 0.90; sorghum grain 0.95; Consumption of Feed by Livestock, Production Research Report No. 79, ERS, USDA.

Table 36.--Market receipts of corn, oats, and barley, marketing years 1962-63 and 1963-64

Year beginning	Corn 1/		Year beginning	Oats 1/		Barley 2/	
	1962-63	1963-64		1962-63	1963-64	1962-63	1963-64
	1,000 bu.	1,000 bu.		1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
October	28,874	51,739	July	12,316	16,108	10,933	12,179
November	84,694	88,661	August	26,804	25,336	34,266	20,749
December	33,292	34,166	September	12,519	8,570	19,340	10,608
January	28,112	37,372	October	7,979	3,679	13,981	11,801
February	38,673	29,439	November	4,434	2,472	13,738	13,352
March	46,313	20,944	December	6,131	2,988	12,108	13,179
April	64,479	19,786	January	6,975	6,196	12,306	16,290
May	65,927	18,229	February	3,739	3,329	13,640	14,739
June	40,033	34,744	March	5,606	2,389	11,830	12,302
July	27,751	32,735	April	3,923	1,812	9,070	13,775
August	22,717		May	3,893	1,862	11,749	10,148
September	20,421		June	5,377	4,387	10,309	12,668
Total	501,286		Total	99,696	79,128	173,270	161,790
			July, 1964		10,772		15,596

1/ Chicago, Milwaukee, Minneapolis, Duluth, St. Louis, Kansas City, Peoria, Omaha, Indianapolis, Sioux City, St. Joseph, Wichita and Toledo.

2/ Minneapolis, Milwaukee, Chicago and Duluth.

Table 37.- Foreign trade in feed grains and byproduct feeds, United States, 1962-63 and 1963-64

Month	Exports											
	Corn 1/		Sorghum grain		Barley 1/		Total 4 feed grains 1/		Soybean meal		Total other oilmeals 2/	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
October	26.4	35.0	11.0	8.2	9.9	4.8	1,329	1,333	101.6	92.5	26.3	17.1
November	43.7	59.9	7.5	11.6	6.6	7.7	1,633	2,189	159.6	154.3	30.8	17.3
December	37.0	55.8	10.6	12.6	6.6	5.8	1,504	2,056	114.5	142.5	13.0	5.2
January	12.4	49.5	4.3	10.9	4.3	5.5	593	1,821	39.1	78.3	.2	.5
February	34.9	35.4	18.4	11.1	4.7	6.7	1,617	1,463	163.5	113.7	18.9	.4
March	37.5	35.0	8.2	4.7	3.2	2.9	1,372	1,184	195.6	79.1	6.2	4.2
April	43.4	43.8	13.9	6.4	2.3	5.0	1,667	1,526	126.2	99.8	7.9	.3
May	41.7	36.9	9.8	6.8	8.0	12.6	1,657	1,533	132.3	125.5	4.9	7.3
June	45.0	29.6	7.6	5.6	5.3	7.7	1,617	1,181	142.3	133.6	2.5	4.6
July	37.1		8.9		1.7		1,354		120.5		1.0	
August	27.9		6.0		4.2		1,070		91.3		10.6	
September	29.2		6.5		5.5		1,142		89.2		14.8	
Total	416.2	112.7	62.3	16,555	1,475.7	137.1						

	Imports											
	Fish meal and solubles 3/		Cottonseed meal		Wheat millfeeds		Molasses		Barley 1/		Oats 1/	
	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64	1962-63	1963-64
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Mil. gal.	Mil. gal.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
October	12.9	31.6	3.0	3.0	18.7	17.2	8.6	8.6	590	2,219	337	323
November	10.4	17.5	4.6	3.1	18.7	18.9	12.8	12.8	654	1,593	438	339
December	19.2	31.3	1.8	3.1	29.9	31.4	22.3	22.3	619	1,534	566	402
January	18.5	31.1	3.4	5.2	28.9	15.0	16.4	16.4	403	610	459	280
February	39.8	35.6	3.4	5.1	20.7	26.0	15.6	15.6	214	323	324	308
March	44.6	40.2	.1	2.4	23.4	23.2	25.1	25.1	229	672	299	337
April	25.6	56.2	5.0	3.1	17.1	29.1	33.6	33.6	231	1,936	284	267
May	30.6	59.6	6.6	1.3	8.6	25.0	35.8	35.8	562	1,530	827	146
June	18.1	34.6	5.0	2.0	7.2	33.5	31.8	31.8	618	483	455	121
July	41.0		5.2			26.4			658		627	
August	42.9		1.7			21.6			669		282	
September	34.8		2.3			26.5			458		289	
Total	338.4	42.1	80.1	293.8	5,905	5,187						

1/ Includes grain equivalent of products. Total feed grain exports include oats not shown separately.

2/ Cottonseed meal and linseed meal.

3/ Solubles are dry weight equivalent.

Table 38.- Production, stocks, and foreign trade in byproduct feeds, foreign trade in feed grains, and corn and barley processing, United States, for specified months 1/

Commodity	Production					Stocks 2/				
	1963	1964				1963	1964			
	June	Mar.	Apr.	May	June	July 1	Apr. 1	May 1	June 1	July 1
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Byproduct feeds										
Soybean cake and meal	918.2	810.1	840.4	877.4	837.1	153.0	172.4	155.3	185.8	140.9
Cottonseed cake and meal	86.6	259.1	212.9	165.1	116.1	214.0	259.9	295.7	325.6	305.0
Linseed cake and meal	36.4	31.3	29.0	35.2	38.2	21.2	10.2	9.9	19.8	23.9
Peanut cake and meal	5.8	10.0	9.0	6.9	6.3	4.3	5.2	6.6	7.6	7.2
Copra cake and meal	6.4	3/	5.0	5.4	7.0	0.6	3/	3/	3/	-
Total	1,053.4	1,110.5	1,096.3	1,090.0	1,004.7	393.1	447.7	467.5	539.8	477.0
Corn gluten feed and meal	111.0	115.5	117.0	120.3	119.4	---	---	---	---	---
Brewers' dried grains	26.6	22.6	25.8	25.8	29.9	2.8	4.6	3.9	4.8	6.3
Distillers' dried grains	27.4	32.3	33.7	33.3	30.0	3.8	4.7	3.1	4.3	3.5
Wheat millfeeds	377.0	406.0	411.0	409.0	507.0	---	---	---	---	---
Rice millfeeds	22.3	39.8	34.8	27.8	19.2	---	---	---	---	---
Alfalfa meal	291.4	34.5	60.4	179.6	281.0	351.1	186.3	130.3	193.5	379.4
Fish meal and solubles	44.3	3.7	10.9	35.5	48.8	---	---	---	---	---
Fats and oils used in feeds 4/	---	29.2	32.6	29.8	32.3	---	---	---	---	---
	Foreign trade									
	Imports					Exports				
	1963	1964				1963	1964			
	June	Mar.	Apr.	May	June	June	Mar.	Apr.	May	June
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Soybean cake and meal	0	5/	0	0	0	142.3	79.1	99.8	125.5	133.6
Cottonseed cake and meal	4.9	2.4	1.1	1.3	2.0	.1	4.1	.2	7.3	2.2
Linseed cake and meal	5/	0	5/	0	.2	2.5	5/	.1	0	2.4
Copra cake and meal	2.5	6/	6/	6/	6/	---	---	---	---	---
Total	7.4	2.4	3.1	1.3	2.2	144.9	83.2	100.1	132.8	136.2
Wheat millfeeds	6.6	23.4	17.1	8.6	7.2	5.7	.6	2.0	.8	1.4
Fish meal	18.0	40.2	56.2	59.6	34.6	---	---	---	---	---
Mixed poultry feed	---	---	---	---	---	10.9	12.1	11.9	13.5	11.2
Mixed dairy feed	---	---	---	---	---	.6	.6	1.0	.8	.7
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
Feed grains										
Corn, including products	47	61	128	178	48	45,031	35,043	43,810	36,947	29,583
Oats, including oatmeal	455	337	267	147	121	962	53	40	375	632
Barley, including malt	618	672	1,936	1,530	483	5,298	2,885	4,956	12,600	7,720
Sorghum grain	---	---	---	---	---	7,628	4,745	6,430	6,795	5,616
Total (1,000 tons)	23	23	54	44	15	1,617	1,184	1,526	1,533	1,181
	Grain processing or use									
	1963	1964								
	May	June	June	Feb.	Mar.	Apr.	May	June		
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.		
Corn										
Wet-processing	15,562	15,502	15,903	17,426	16,737	17,200	16,976			
Distilled spirits and alcohol	2,709	2,158	2,350	2,371	2,364	2,195	7/			
Barley										
Malt liquors	8,132	7,993	6,169	7,298	7,930	7,617	7/			
Distilled spirits and alcohol	560	379	547	526	557	520	7/			

1/ Data compiled from reports of the Bureau of the Census, Agricultural Marketing Service, Fish and Wildlife Service of the Department of the Interior, Dun and Bradstreet, New York. 2/ At processors' plants. 3/ Not available. 4/ New series beginning January 1964. 5/ Less than 50 tons. 6/ Not reported separately beginning January 1964. 7/ Not available at time of printing.

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